

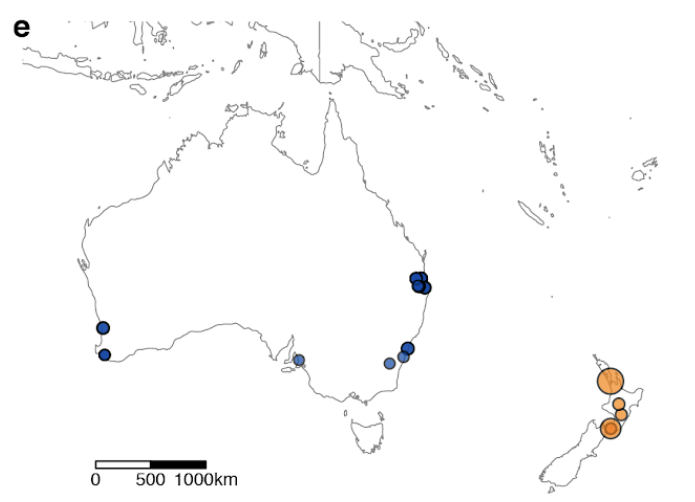
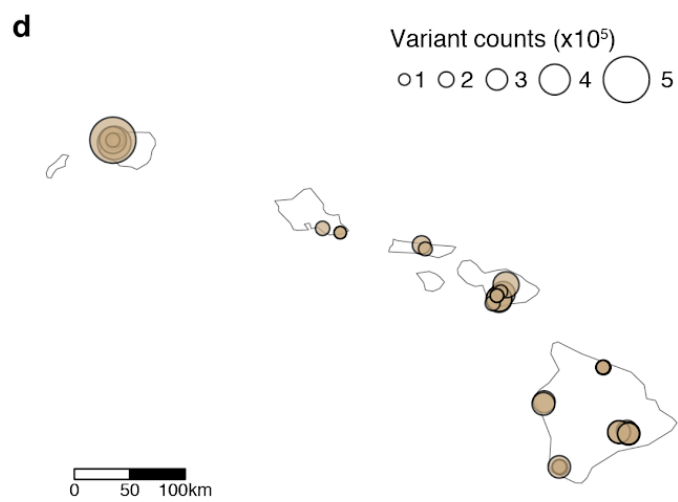
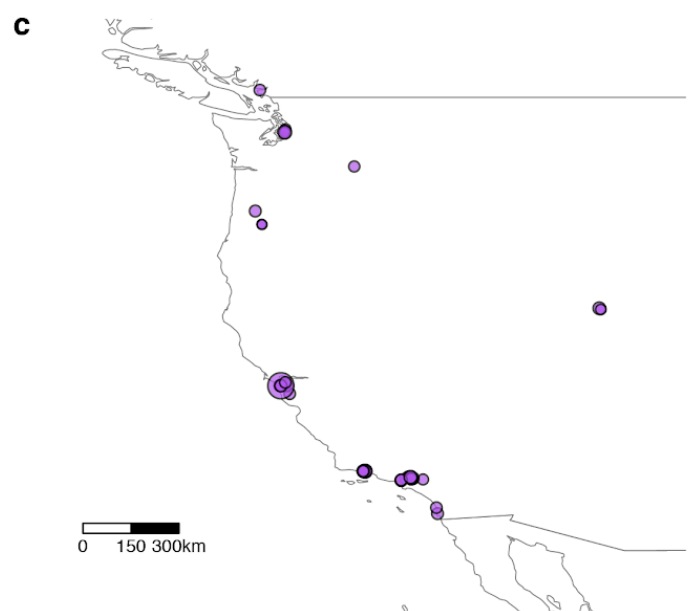
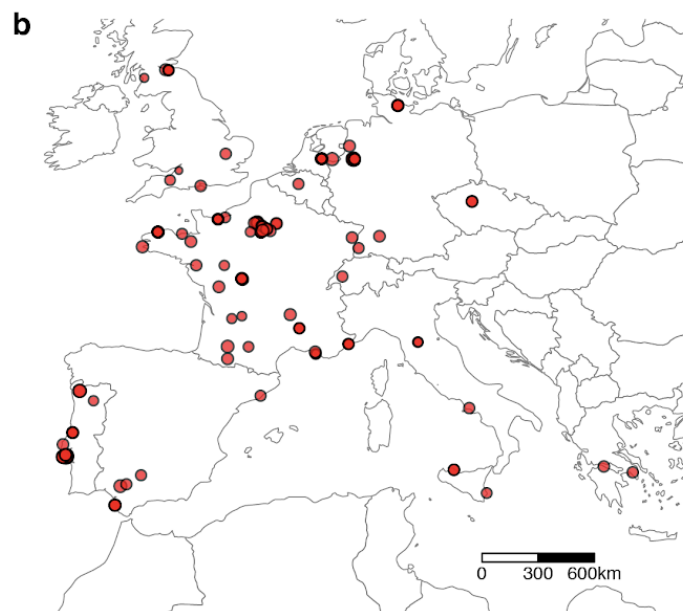
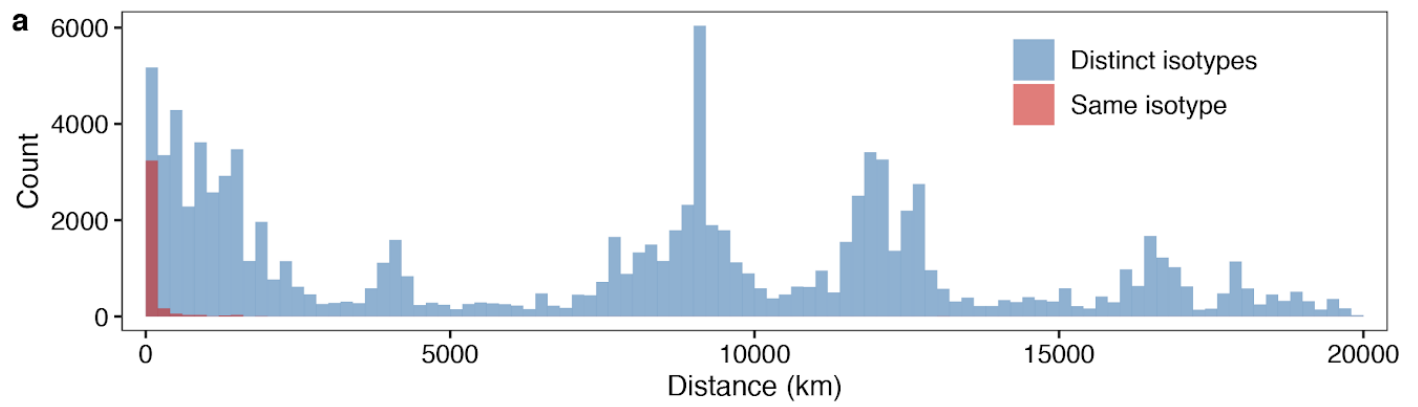
**Balancing selection maintains hyper-divergent haplotypes
in *C. elegans***

Supplementary Information

Daehan Lee[#], Stefan Zdraljevic[#], Lewis Stevens[#], Ye Wang,
Robyn E. Tanny, Timothy A. Crombie, Daniel E. Cook,
Amy K. Webster, Rojin Chirakar, L. Ryan Baugh,
Mark G. Sterken, Christian Braendle, Marie-Anne Félix,
Matthew V. Rockman, Erik C. Andersen^{*}

[#] These authors contributed equally to this work.

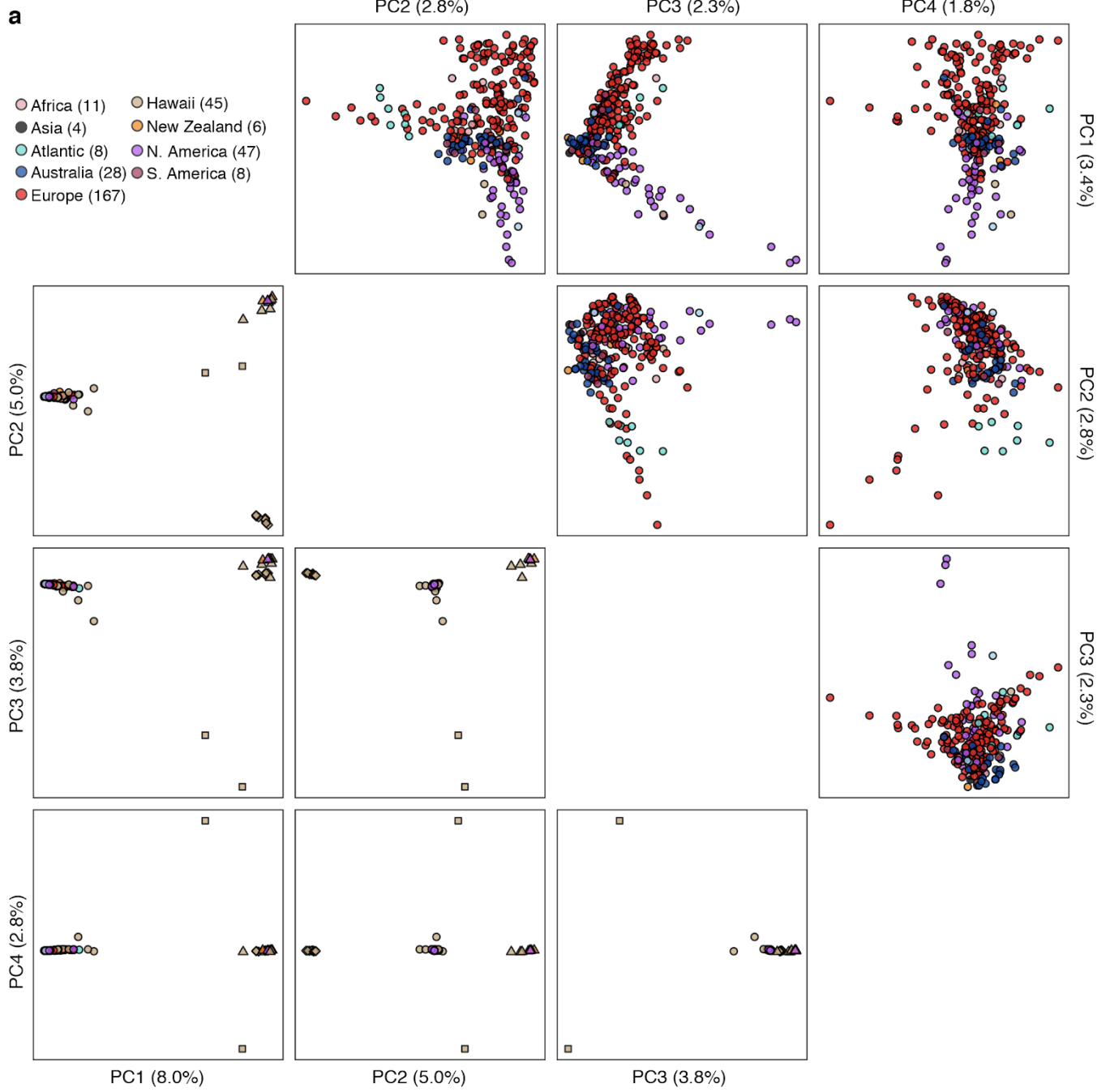
^{*} Correspondence should be addressed to E.C.A (erik.andersen@northwestern.edu).

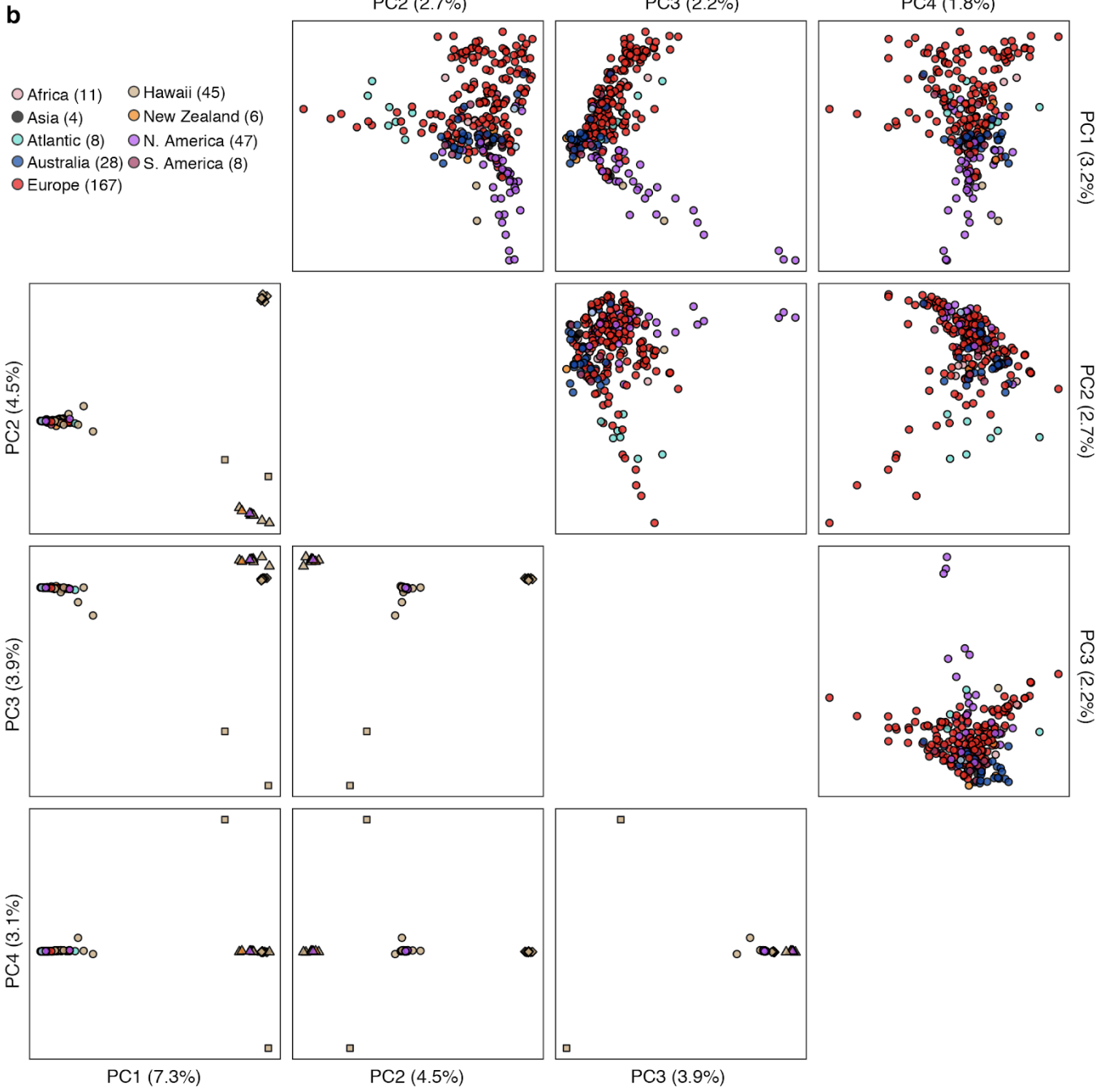


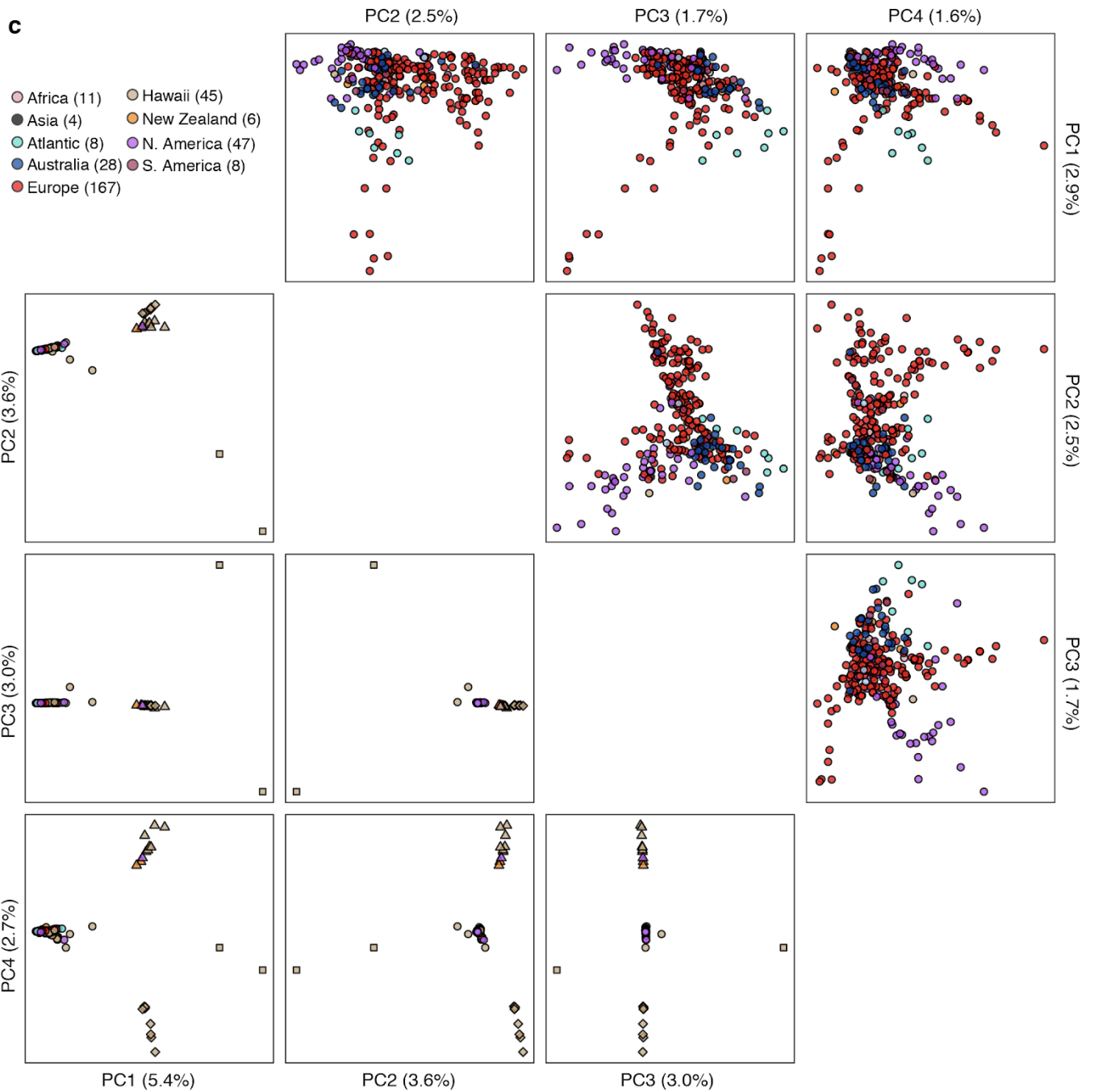
Supplementary Fig. 1 | Geographic distribution of *C. elegans* isotypes

(a) A histogram for the pairwise distances between locations of wild strain isolations with the same isotype (red) or distinct isotypes (blue). Distances between two isolations are shown on the x-axis, and counts for the wild strain pair are shown on the y-axis.

(b-e) The geographic distributions of isotypes from (b) Europe, (c) Pacific coast of North America, (d) Hawaii Islands, and (e) Australia and New Zealand are shown. Each circle corresponds to one of the wild isotypes, and the size of each circle corresponds to the number of non-reference homozygous alleles.

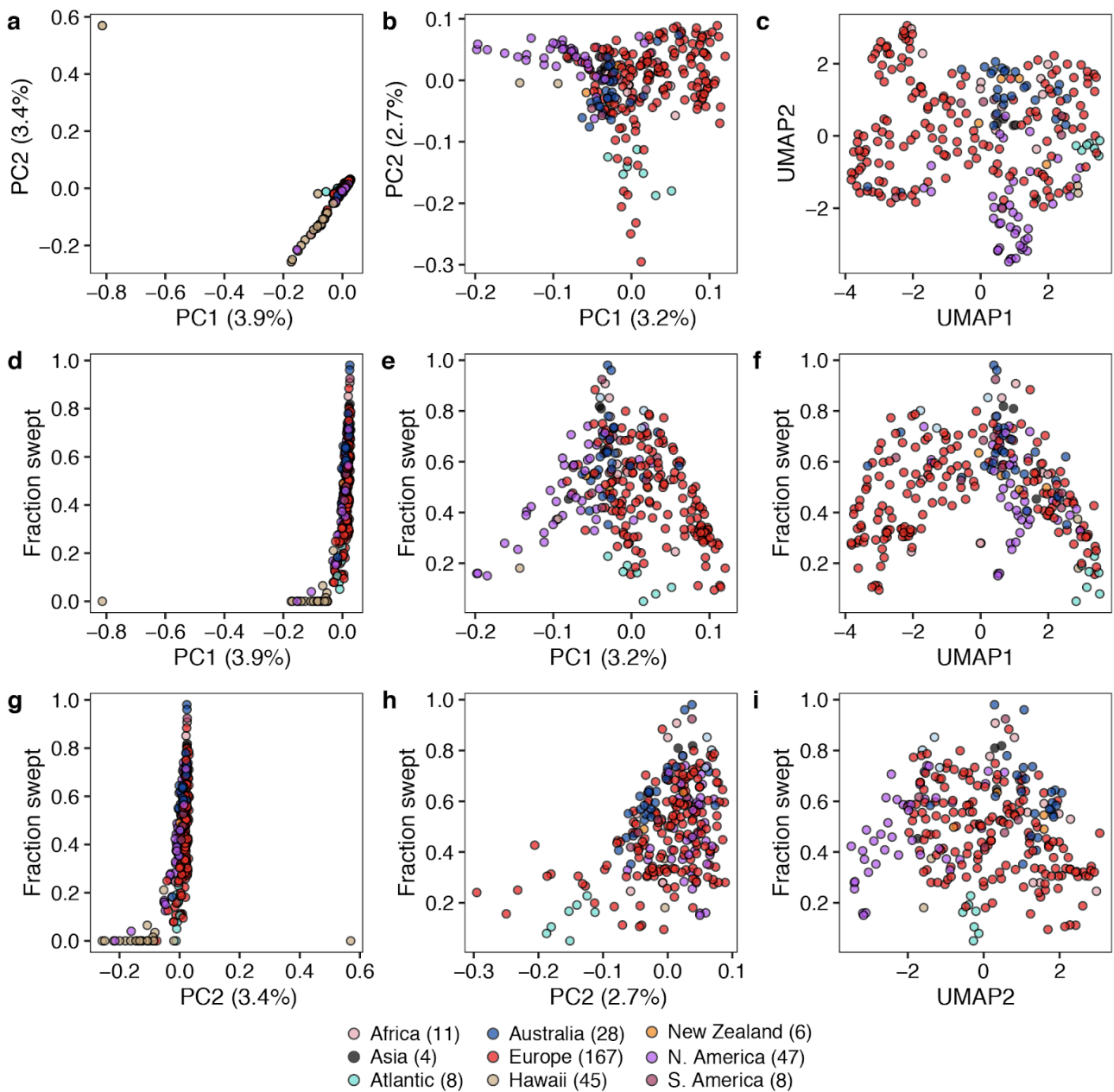






Supplementary Fig. 2 | The population structure of 328 wild *C. elegans* isotypes

Plots of the 324 isotypes from Global (circle), Pacific (triangle), and Hawaii (diamond) and two divergent isotypes (XZ1516 and ECA701, square) according to their values for each of the four significant axes of variation, as determined by principal component analysis (PCA) of the genotype covariances from LD-pruned genotype matrices (LD threshold: 0.8 (a), 0.6 (b), 0.2 (c)). (Lower triangle (bottom left plots): without outlier removal, upper triangle (top right plots): with outlier removal. See Methods.) Each point is one of the 328 isotypes, which is colored by the geographic origin of the isotype.



Supplementary Fig. 3 | Selective sweeps shape population structure of the Global group

(a) Plot of 308 isotypes that belong to the Global group according to their values for each of the two significant axes of variation, as determined by PCA of the genotype covariances. Each point is one of the 308 isotypes, which is colored by their geographic origins.

(b) Plot of 251 isotypes from the Global group according to the values for each of the two significant axes of variation, as determined by PCA of the genotype covariances with five iterations of outlier removal. Each point is one of the 251 isotypes, which is colored by the geographic origin.

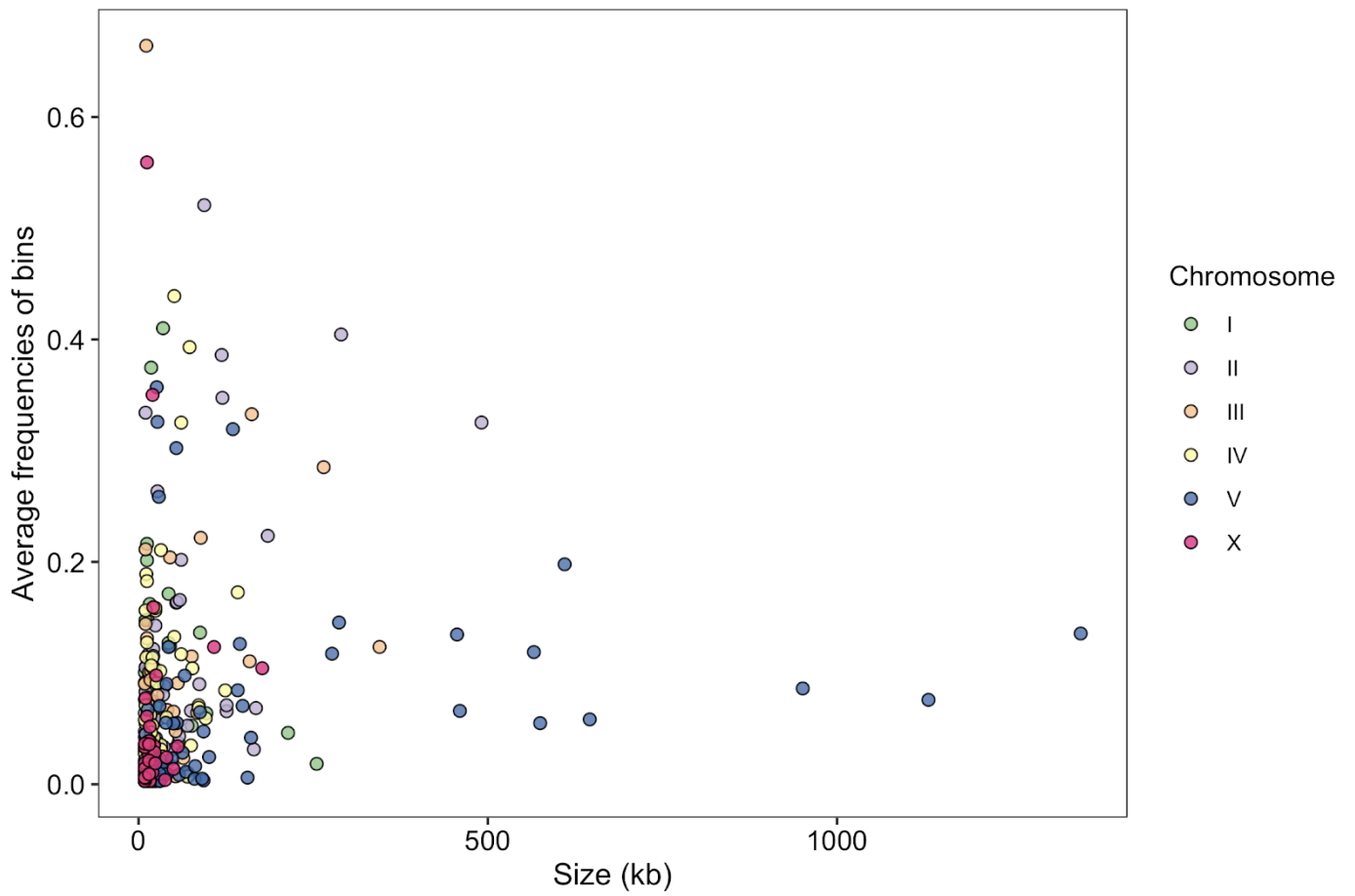
(c) Plot of 251 isotypes from the Global group according to the values for each of the two significant axes of variation, as determined by Uniform Manifold Approximation and Projection (UMAP) analysis using five principal components from PCA of the genotype covariances with five iterations of outlier removal. Each point is one of the 251 isotypes, which is colored by the geographic origin.

(d-i) Scatter plots for the fraction of swept chromosomes for the isotypes in (a-c), respectively. The first (d-f) or second significant axis (g-i) of variation defined in (a-c) is shown on the x-axis, and the fraction of swept chromosomes is shown on the y-axis. Each point corresponds to one of 308 (d, g) or 251 (e-f, h-i) isotypes and is colored by the geographic origin.



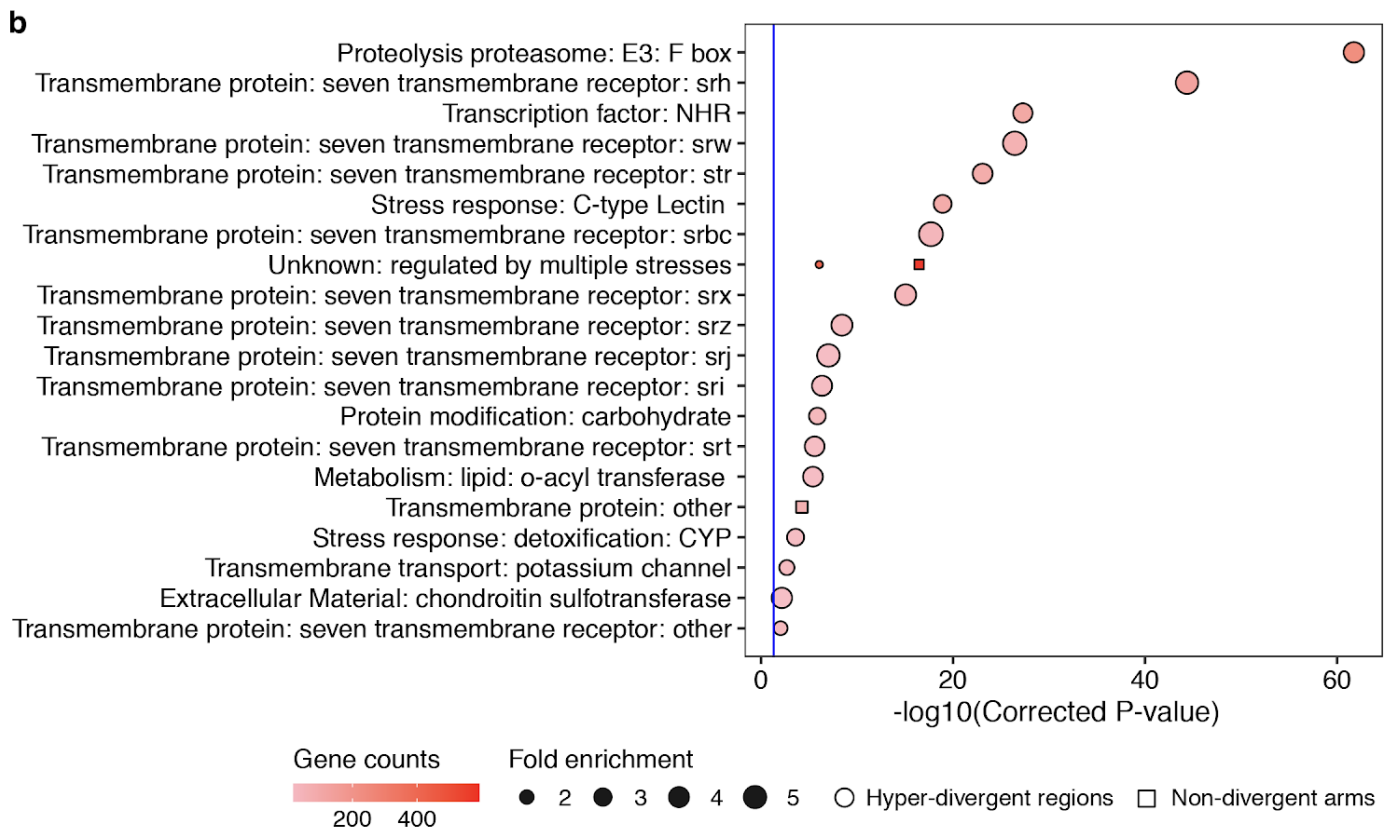
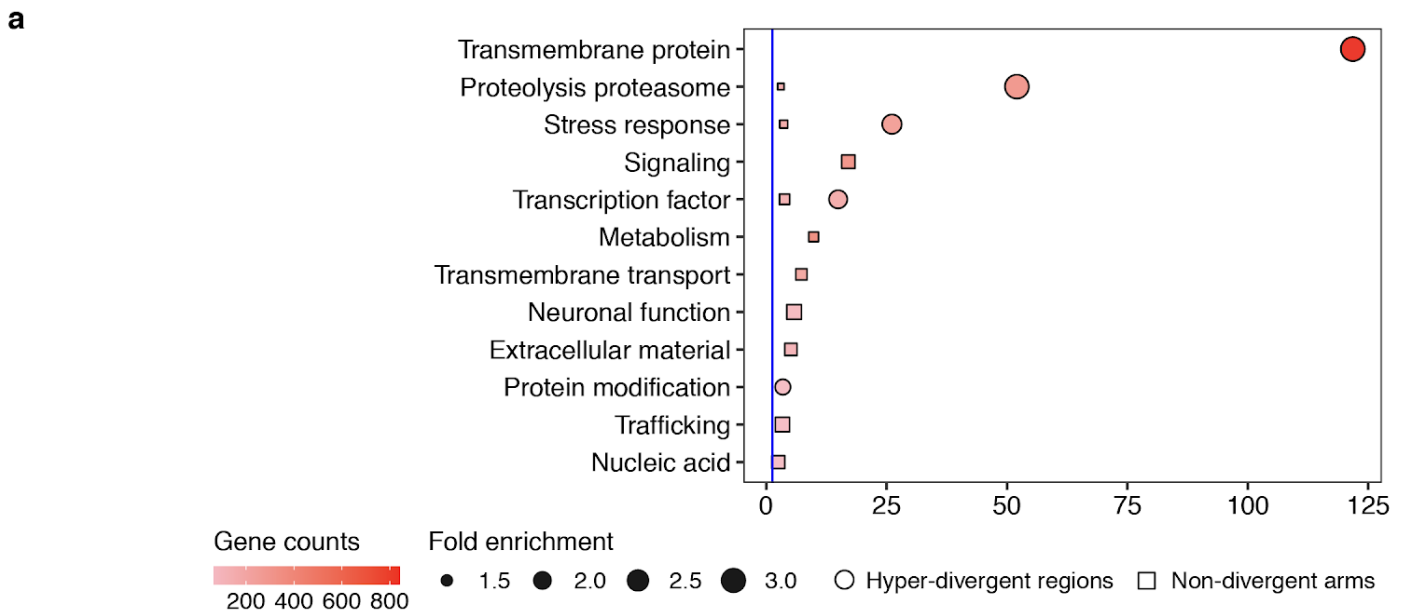
Supplementary Fig. 4 | Short-read alignments of wild isotypes in hyper-divergent regions

Short-read alignments from five isotypes (N2, CB4856, JU2316, ECA593, and XZ1516) to the N2 reference genome (WS245) for (a) a region of chromosome II (II:3,200,000-3,211,000) and (b) a region of chromosome IV (IV:2,704,000-2,715,000) plotted by IGV 2.8.0 are shown. For each plot, genes in the interval are shown at the top. For each isotype, the top panel shows the coverage of genomic positions, and the bottom panel shows aligned short-reads at genomic positions (gray: normal reads, red: reads with putative deletion, blue: reads with putative insertion, navy and turquoise: reads with putative inversion, green: reads with putative duplication or translocation). Colored vertical lines indicate mismatched bases at the position.



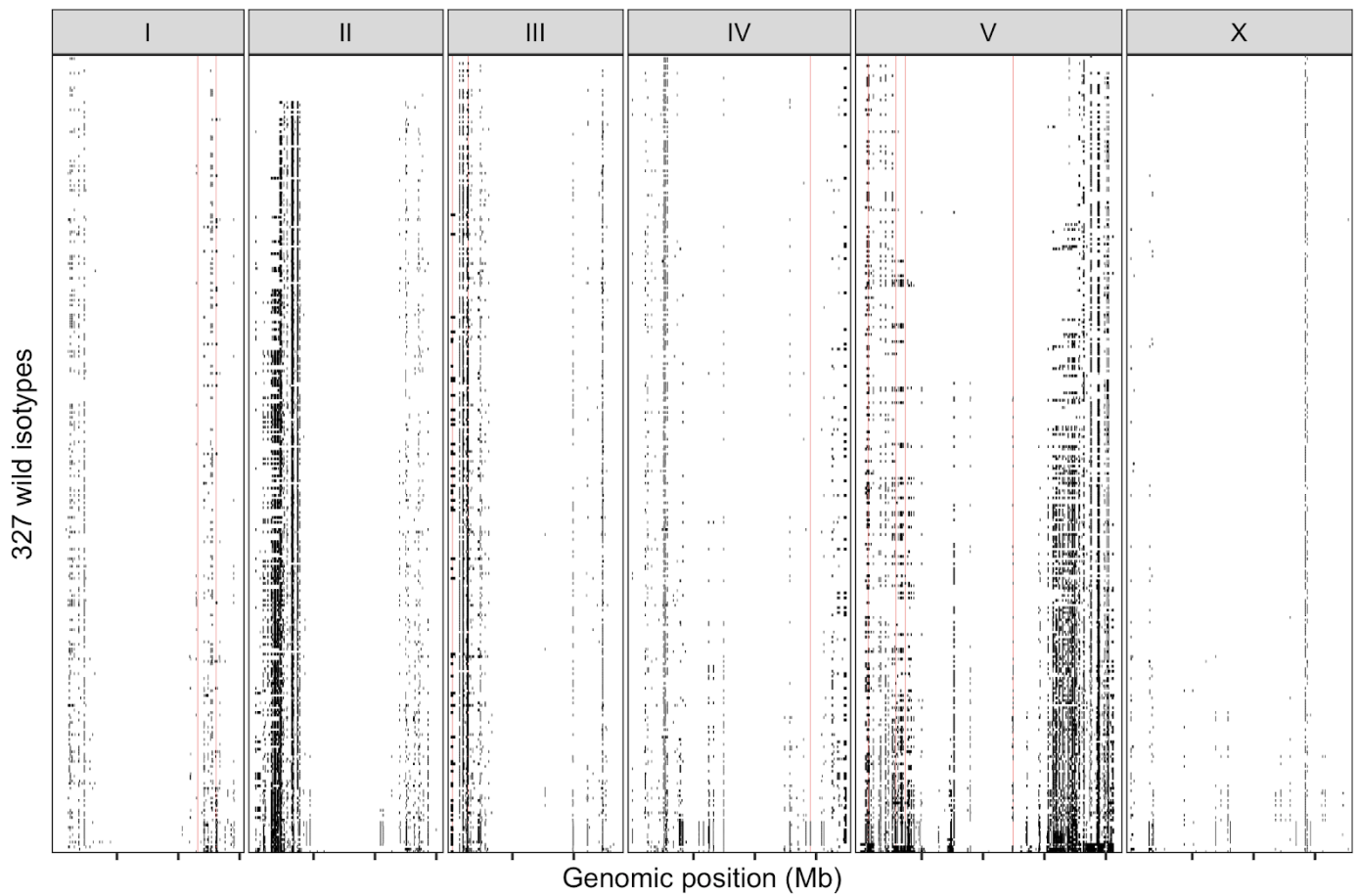
Supplementary Fig. 5 | Sizes and frequencies of population-wide hyper-divergent blocks

The population-wide hyper-divergent block sizes with respect to the N2 reference genome (x-axis) and the average frequencies of 1 kb bins that are classified as hyper-divergent across 327 non-reference isotypes (y-axis) is shown. Each point corresponds to one of the 366 population-wide hyper-divergent blocks.



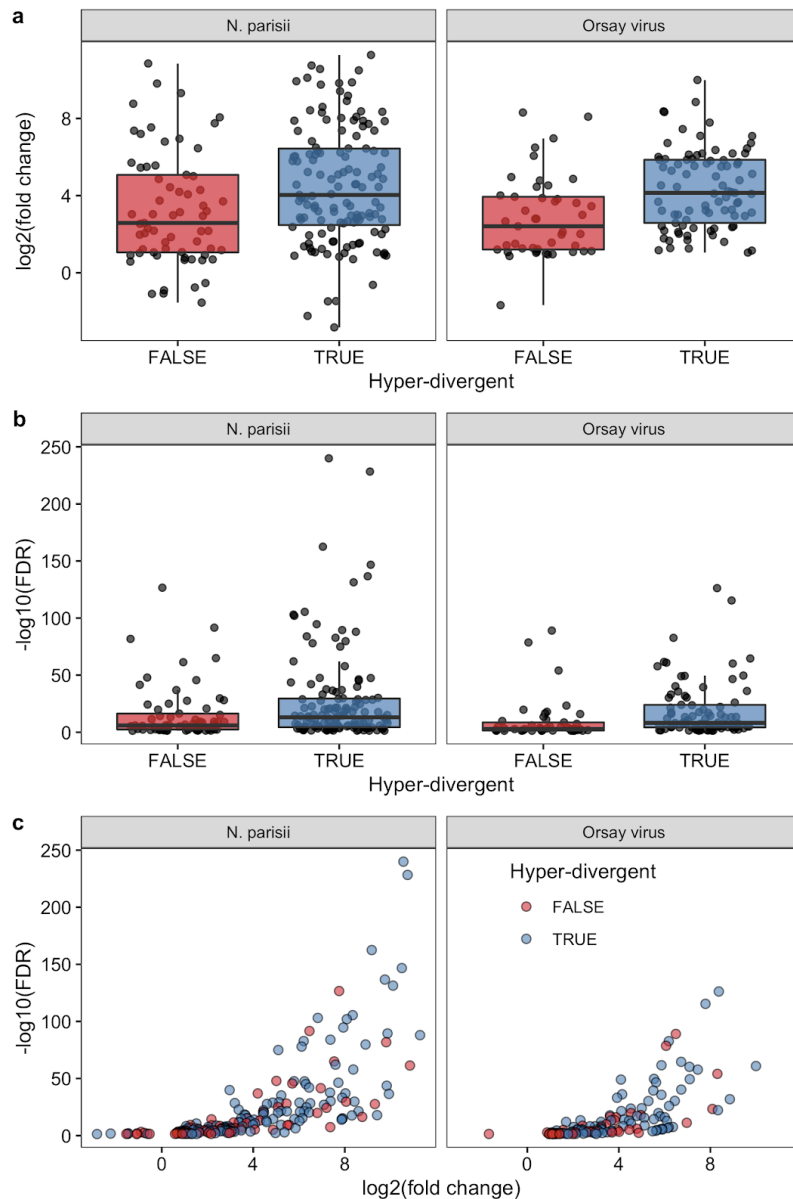
Supplementary Fig. 6 | Gene-set enrichment (Wormcat) for hyper-divergent regions

Gene-set enrichment for non-divergent chromosomal arms (square) and hyper-divergent regions (circle) are shown. Annotations in WormCat category 1 (a) and 3 (b) (see Methods) that are significantly enriched in non-divergent regions, hyper-divergent regions, or both are shown on the y-axis. Bonferroni-corrected significance values for gene-set enrichment analysis are shown on the x-axis. Sizes of squares and circles correspond to the fold enrichment of the annotation, and colors of square and circle correspond to the gene counts of the annotation. The blue line shows the Bonferroni-corrected significance threshold (corrected p-value = 0.05).



Supplementary Fig. 7 | Co-localization of *pals* genes and hyper-divergent regions

The genome-wide distribution of *pals* loci (red line) and hyper-divergent regions across 327 non-reference wild *C. elegans* isotypes is shown. Each row is one of the 327 isotypes, ordered by the total amount of genome covered by hyper-divergent regions (black). The genomic position in Mb is plotted on the x-axis, and each tick represents 5 Mb of the chromosome.



Supplementary Fig. 8 | Induction of genes in hyper-divergent regions in responses to natural pathogens

(a) Tukey box plots of fold changes in gene expression level upon natural pathogen treatment are shown. Each point corresponds to a differentially expressed gene (DEG) upon treatment of *N. parisii* (left, $n = 196$) and Orsay virus (right, $n = 130$), which are grouped by their hyper-divergent status. Gene expression changes ($\log_2(\text{fold change})$) in pathogen response are shown on the y-axis.

(b) Tukey box plots of significance in gene expression changes upon natural pathogen treatment are shown with data points plotted behind. Each point corresponds to DEGs upon treatment of *N. parisii* (left, $n = 196$) and Orsay virus (right, $n = 130$), which are grouped by their location. The significance of differences in pathogen response are shown on the y-axis. (a,b) The horizontal line in the middle of the box is the median, and the box denotes the 25th to 75th quantiles of the data. The vertical line represents the 1.5x interquartile range.

(c) A scatter plot for the gene expression changes and significance of DEGs in (a) and (b). Each point corresponds to differentially expressed genes (DEGs) upon treatment of *N. parisii* (left, $n = 196$) and Orsay virus (right, $n = 130$), which are colored by their location (blue: within hyper-divergent regions, red: within the rest of the genome). Gene expression changes in pathogen response are shown on the x-axis, and significance of differences are shown on the y-axis.

Supplementary Table 1 | Sampling information for 609 wild strains

The sampling location and dates for all 611 *C. elegans* strains. The 328 reference isotypes are listed in the second column named "Isotype". The GPS coordinates are in the third and fourth columns, the person who sampled the strain is listed in the fifth column, and the isolation date is in the sixth column.

Strain	Isotype	Latitude	Longitude	Sampled by	isolation date
AB1	AB1	-34.93	138.59	D. Riddle and A. Bird	1983
AB4	CB4858	-34.93	138.59	D. Riddle and A. Bird	1983
BRC20067	BRC20067	24.072954	121.169736	J. Wang	2012-01-13
BRC20113	BRC20067	24.124167	121.283056	C. Lee and N. Chang	2014-05-09
BRC20231	MY23	23.541517	120.908112	T. Volans	2014-06-15
BRC20263	BRC20263	-33.8674861	151.206989	C. Lee and N. Chang	2014-08-04
CB4852	CB4852	NA	NA	Unknown	pre-1966
CB4854	CB4854	34.189	-118.131	C. Johnson	1973-12-01
CB4856	CB4856	21.33	-157.86	L. Hollen	1972-08-01
CB4932	CB4932	51.02	-3.1	P. Grewal	pre-1991
CX11254	CX11254	34.130138	-118.11484	A. Sivasundar	2003-09-01
CX11262	CX11262	34.130138	-118.11484	A. Sivasundar	2003-09-01
CX11264	CX11264	34.130138	-118.11484	A. Sivasundar	2003-09-01
CX11271	CX11271	34.13712	-118.12532	A. Sivasundar	2003-09-01
CX11276	CX11276	34.20111	-118.21198	A. Sivasundar	2003-09-01
CX11285	CX11285	34.14331	-118.05496	A. Sivasundar	2003-09-01
CX11292	CX11292	34.13531	-118.30582	A. Sivasundar	2004-02-01
CX11307	CX11307	34.12946	-118.10987	A. Sivasundar	2013-09-03
CX11314	CX11314	34.12946	-118.10987	A. Sivasundar	2003-09-01
CX11315	CX11315	34.12946	-118.10987	A. Sivasundar	2013-09-03
DL200	DL200	9.03	38.74	D. Denver	2007-12-01
DL226	DL226	44.5633	-123.2821	C. Hilburn	2008
DL238	DL238	19.11	-155.81	J. Knapp	2008-07-15
ECA189	ECA189	19.423889	-155.2225	T. Blanche	2014-07-09
ECA190	ECA189	19.423889	-155.2225	T. Blanche	2014-07-09
ECA191	ECA191	19.424167	-155.22194	T. Blanche	2014-07-09
ECA192	ECA189	19.424444	-155.22194	T. Blanche	2014-07-09
ECA193	ECA189	19.424444	-155.22194	T. Blanche	2014-07-09
ECA243	CB4851	44.85	0.48	V. Nigon	pre-1949
ECA245	CB4853	34.171	-118.131	C. Johnson	1974-05-01
ECA246	CB4853	34.189	-118.131	C. Johnson	1974-05-01
ECA248	CB4855	37.44	-122.14	T. Doniach	1982
ECA249	CB4857	34.096	-117.719	E. Hedgecock	1972-11-01

ECA250	CB4857	34.096	-117.719	E. Hedgecock	1972-11-01
ECA251	CB4858	34.1	-118.1	E. Hedgecock	1973-06-01
ECA259	PB306	NA	NA	S. Baird	1998-11-28
ECA347	ECA347	19.438889	-155.30361	C. Andersen and M. Andersen	2016-02-07
ECA348	ECA348	37.775334	-122.25389	S. Zdraljevic	2015-12-30
ECA349	ECA349	32.765758	-117.23674	E. Andersen	2016-02-09
ECA350	ECA349	32.765353	-117.23544	E. Andersen	2016-02-09
ECA36	ECA36	-36.893333	174.745529	I. Ly	2013-07-27
ECA363	ECA363	20.723611	-156.30444	C. Andersen and M. Andersen	2016-02-19
ECA369	ECA369	21.175556	-157.00639	C. Andersen and M. Andersen	2016-02-20
ECA372	ECA372	22.121667	-159.66444	C. Andersen and M. Andersen	2016-02-27
ECA393	ECA189	19.449831	-155.23549	G. Chavez	2016-05-17
ECA394	ECA189	19.449831	-155.23549	G. Chavez	2016-05-17
ECA395	ECA189	19.449831	-155.23549	G. Chavez	2016-05-17
ECA396	ECA396	19.449831	-155.23549	G. Chavez	2016-05-17
ECA397	ECA396	19.449831	-155.23549	G. Chavez	2016-05-17
ECA398	ECA396	19.449831	-155.23549	G. Chavez	2016-05-17
ECA399	ECA396	19.449831	-155.23549	G. Chavez	2016-05-17
ECA551	JU311	44.42	4.4	M.-A. Félix	2002-09-08
ECA552	MY2573	43.8658	5.0628	M.-A. Félix	2013-11-17
ECA571	ED3073	-1.05	36.39	E. Dolgin	2006-05-17
ECA572	ED3073	-1.05	36.39	E. Dolgin	2006-05-17
ECA589	JU1395	47.2199	0.04619	M.-A. Félix	2008-03-01
ECA592	ECA592	34.417128	-119.64092	E. Andersen	2017-03-07
ECA593	ECA593	34.418632	-119.64216	E. Andersen	2017-03-07
ECA594	ECA594	34.417532	-119.64067	E. Andersen	2017-03-07
ECA615	JU1581	48.7015	2.1725	M.-A. Félix	2008-09-08
ECA616	JU1530	48.7015	2.1725	M.-A. Félix	2008-09-09
ECA640	ECA640	34.065378	-118.44116	E. Andersen	2017-06-22
ECA701	ECA701	22.123283	-159.65643	D. Cook	2017-08-11
ECA702	ECA701	22.123283	-159.65643	D. Cook	2017-08-11
ECA703	ECA703	20.038831	-155.43892	S. Zdraljevic	2017-08-13
ECA704	ECA812	20.039783	-155.44152	D. Lee	2017-08-13
ECA705	ECA705	20.038831	-155.43892	S. Zdraljevic	2017-08-13
ECA706	ECA706	20.038831	-155.43892	S. Zdraljevic	2017-08-13
ECA707	ECA778	20.039783	-155.44152	D. Lee	2017-08-13
ECA708	ECA778	20.039783	-155.44152	D. Lee	2017-08-13

ECA709	ECA778	20.039783	-155.44152	D. Lee	2017-08-13
ECA710	ECA710	20.039656	-155.4381	D. Lee	2017-08-13
ECA711	ECA712	19.423864	-155.22248	S. Zdraljevic	2017-08-14
ECA712	ECA712	19.423864	-155.22248	S. Zdraljevic	2017-08-14
ECA713	ECA712	19.423864	-155.22248	S. Zdraljevic	2017-08-14
ECA714	ECA712	19.423864	-155.22248	S. Zdraljevic	2017-08-14
ECA715	ECA712	19.423864	-155.22248	S. Zdraljevic	2017-08-14
ECA716	ECA807	20.039844	-155.44141	D. Lee	2017-08-13
ECA717	ECA807	20.039844	-155.44141	D. Lee	2017-08-13
ECA718	ECA807	20.039844	-155.44141	D. Lee	2017-08-13
ECA719	ECA812	20.039858	-155.44142	S. Zdraljevic	2017-08-13
ECA720	ECA807	20.039858	-155.44142	S. Zdraljevic	2017-08-13
ECA721	ECA778	20.039858	-155.44142	S. Zdraljevic	2017-08-13
ECA722	ECA722	19.423975	-155.22263	S. Zdraljevic	2017-08-14
ECA723	ECA723	19.424272	-155.22166	D. Lee	2017-08-14
ECA724	ECA724	19.439144	-155.30383	S. Zdraljevic	2017-08-14
ECA725	ECA724	19.439144	-155.30383	S. Zdraljevic	2017-08-14
ECA726	ECA724	19.439144	-155.30383	S. Zdraljevic	2017-08-14
ECA727	ECA724	19.439144	-155.30383	S. Zdraljevic	2017-08-14
ECA728	ECA723	19.424272	-155.22166	D. Lee	2017-08-14
ECA729	ECA723	19.424272	-155.22166	D. Lee	2017-08-14
ECA730	ECA730	19.423869	-155.22248	S. Zdraljevic	2017-08-14
ECA731	ECA733	19.115886	-155.81839	S. Zdraljevic	2017-08-15
ECA732	ECA732	19.115403	-155.81845	E. Andersen	2017-08-15
ECA733	ECA733	19.115886	-155.81839	S. Zdraljevic	2017-08-15
ECA734	ECA738	21.13927631	-156.97406	S. Brady	2017-08-12
ECA735	ECA738	21.13927631	-156.97406	S. Brady	2017-08-12
ECA736	ECA738	21.13927631	-156.97406	S. Brady	2017-08-12
ECA737	ECA738	21.13927631	-156.97406	S. Brady	2017-08-12
ECA738	ECA738	21.13927631	-156.97406	S. Brady	2017-08-12
ECA739	ECA760	20.039869	-155.44162	D. Cook	2017-08-17
ECA740	ECA740	20.670022	-156.33919	B. Rodriguez	2017-08-14
ECA741	ECA741	20.6762	-156.33832	B. Rodriguez	2017-08-14
ECA742	ECA742	20.80569	-156.2781	K. Evans	2017-08-16
ECA743	ECA743	20.741871	-156.32317	K. Evans	2017-08-16
ECA744	ECA744	19.719231	-155.94957	S. Zdraljevic	2017-08-15
ECA745	ECA745	19.700464	-155.95584	E. Andersen	2017-08-15

ECA746	ECA746	19.115292	-155.81934	S. Zdraljevic	2017-08-15
ECA747	ECA745	19.700464	-155.95584	E. Andersen	2017-08-15
ECA748	ECA812	20.039847	-155.44149	D. Cook	2017-08-17
ECA749	ECA760	20.039875	-155.44161	D. Cook	2017-08-17
ECA750	ECA812	20.039847	-155.44149	D. Cook	2017-08-17
ECA751	ECA812	20.039847	-155.44149	D. Cook	2017-08-17
ECA752	ECA760	20.039847	-155.44149	D. Cook	2017-08-17
ECA753	ECA760	20.039847	-155.44149	D. Cook	2017-08-17
ECA754	ECA760	20.039869	-155.44146	D. Lee	2017-08-17
ECA755	ECA812	20.039869	-155.44146	D. Lee	2017-08-17
ECA756	ECA778	20.039822	-155.44153	D. Cook	2017-08-17
ECA757	ECA778	20.039822	-155.44153	D. Cook	2017-08-17
ECA758	ECA760	20.039886	-155.44153	D. Lee	2017-08-17
ECA759	ECA812	20.039886	-155.44153	D. Lee	2017-08-17
ECA760	ECA760	20.039869	-155.44162	D. Cook	2017-08-17
ECA761	ECA812	20.039847	-155.44149	D. Cook	2017-08-17
ECA762	ECA812	20.039822	-155.44153	D. Cook	2017-08-17
ECA763	ECA778	20.039878	-155.44161	D. Cook	2017-08-17
ECA764	ECA778	20.039878	-155.44161	D. Cook	2017-08-17
ECA765	ECA778	20.039878	-155.44161	D. Cook	2017-08-17
ECA766	ECA778	20.039878	-155.44161	D. Cook	2017-08-17
ECA767	ECA778	20.039878	-155.44161	D. Cook	2017-08-17
ECA768	ECA768	20.039914	-155.44156	D. Cook	2017-08-17
ECA769	ECA760	20.039869	-155.44162	D. Cook	2017-08-17
ECA770	ECA807	20.039869	-155.44153	D. Lee	2017-08-17
ECA771	ECA812	20.039864	-155.44164	D. Cook	2017-08-17
ECA772	ECA768	20.039908	-155.4415	D. Lee	2017-08-17
ECA773	ECA812	20.039864	-155.44164	D. Cook	2017-08-17
ECA774	ECA812	20.039869	-155.44153	D. Lee	2017-08-17
ECA775	ECA812	20.039869	-155.44153	D. Lee	2017-08-17
ECA776	ECA812	20.039869	-155.44153	D. Lee	2017-08-17
ECA777	ECA777	20.039908	-155.4415	D. Lee	2017-08-17
ECA778	ECA778	20.039908	-155.4415	D. Lee	2017-08-17
ECA779	ECA760	20.039858	-155.44161	D. Cook	2017-08-17
ECA780	ECA760	20.039858	-155.44161	D. Cook	2017-08-17
ECA781	ECA778	20.039858	-155.44161	D. Cook	2017-08-17
ECA782	ECA812	20.039875	-155.44161	D. Cook	2017-08-17

ECA783	ECA812	20.039783	-155.44148	D. Lee	2017-08-17
ECA784	ECA760	20.039783	-155.44148	D. Lee	2017-08-17
ECA785	ECA760	20.039783	-155.44148	D. Lee	2017-08-17
ECA786	ECA812	20.039875	-155.44161	D. Cook	2017-08-17
ECA787	ECA812	20.039783	-155.44148	D. Lee	2017-08-17
ECA807	ECA807	20.039869	-155.44153	D. Lee	2017-08-17
ECA808	ECA760	20.039858	-155.44161	D. Cook	2017-08-17
ECA809	ECA812	20.039783	-155.44148	D. Lee	2017-08-17
ECA810	ECA778	20.039897	-155.44153	D. Lee	2017-08-17
ECA811	ECA778	20.039897	-155.44153	D. Lee	2017-08-17
ECA812	ECA812	20.039917	-155.44154	D. Lee	2017-08-17
ECA813	ECA812	20.039917	-155.44154	D. Lee	2017-08-17
ECA822	ECA705	20.038831	-155.43892	S. Zdraljevic	2017-08-13
ECA922	ECA923	21.290067	-157.70792	N. Singh	2017-12-01
ECA923	ECA923	21.290067	-157.70792	N. Singh	2017-12-01
ECA924	ECA923	21.290067	-157.70792	N. Singh	2017-12-01
ECA925	ECA923	21.290067	-157.70792	N. Singh	2017-12-01
ECA926	ECA928	21.290067	-157.70792	N. Singh	2017-12-01
ECA927	ECA923	21.290067	-157.70792	N. Singh	2017-12-01
ECA928	ECA928	21.290067	-157.70792	N. Singh	2017-12-01
ECA930	ECA930	31.778363	35.197931	E. Bokman, A. Topper, C. Pritz	2017-12-14
ED3005	ED3005	55.94	-3.36	A. Cutter	2004-10-25
ED3011	ED3011	55.92	-3.19	A. Cutter	2004-11-11
ED3012	ED3012	55.92	-3.19	A. Cutter	2004-11-26
ED3017	ED3017	55.92	-3.19	A. Cutter	2004-12-03
ED3040	ED3040	-26.166667	28.016667	E. Dolgin	2006-05-05
ED3046	ED3046	-33.366667	19.316667	E. Dolgin	2006-05-05
ED3048	ED3048	-33.366667	19.316667	E. Dolgin	2006-04-02
ED3049	ED3049	-33.366667	19.316667	E. Dolgin	2006-04-02
ED3052	ED3052	-33.366667	19.316667	E. Dolgin	2006-05-05
ED3073	ED3073	-1.083333	36.65	E. Dolgin	2006-05-17
ED3077	ED3077	-1.316667	36.8	E. Dolgin	2006-05-17
EG4347	EG4347	44.04789	-123.07108	M. Ailion	2006-10-09
EG4349	EG4349	40.771467	-111.87316	M. Ailion	2006-10-02
EG4724	EG4724	41.6288	-8.3476	M. Ailion	2007-03-28
EG4725	EG4725	41.6288	-8.3476	M. Ailion	2007-03-28
EG4946	EG4946	40.72596	-111.82184	G. Hollopeter	2007-09-27

GXW1	GXW1	30.542889	114.419828	G. Wang	2010-11-05
JT11398	JT11398	47.763944	-122.27548	J. Kemner	2003-12-01
JU1088	JU1088	34.7613	138.0149	M.-A. Félix	2007-03-14
JU1172	JU1172	-36.87	-73.04	M.-A. Félix	2007-04-01
JU1200	JU1200	55.577	-4.6	T. Page	2007-08-01
JU1212	JU1212	48.71	-3.81	M.-A. Félix	2007-09-24
JU1213	JU1213	48.71	-3.81	M.-A. Félix	2007-09-24
JU1242	JU1242	49.1269	1.9595	M.-A. Félix	2007-10-14
JU1246	JU1246	49.12618	1.96152	M.-A. Félix	2007-10-14
JU1249	JU1249	49.126	1.951	M.-A. Félix	2007-10-14
JU1395	JU1395	47.2199	0.04619	M.-A. Félix	2008-03-01
JU1400	JU1400	37.3845	-5.988	M.-A. Félix	2008-03-29
JU1409	JU1409	37.468	-5.637	M.-A. Félix	2008-03-31
JU1440	JU1440	41.41307	2.15231	M.-A. Félix	2008-06-09
JU1491	JU1491	46.63	1.06	M.-A. Félix	2008-08-17
JU1516	JU1581	48.7015	2.1725	M.-A. Félix	2008-09-09
JU1530	JU1530	48.7015	2.1725	M.-A. Félix	2008-09-09
JU1543	JU1543	48.7015	2.1725	M.-A. Félix	2008-09-08
JU1568	JU1568	48.8092	2.3862	M.-A. Félix	2008-10-05
JU1580	JU1580	48.7015	2.1725	M.-A. Félix	2008-10-06
JU1581	JU1581	48.7015	2.1725	M.-A. Félix	2008-10-23
JU1586	JU1586	46.63	1.06	M.-A. Félix	2008-11-03
JU1652	JU1652	-34.86	-56.19	R. Giordano	2009
JU1656	JU1213	48.7049	-3.7941	M.-A. Félix	2009-07-14
JU1666	JU1666	48.7049	-3.7941	M.-A. Félix	2009-07-14
JU1762	JU1213	48.695548	-3.790033	M.-A. Félix	2009-08-16
JU1770	JU1213	48.695548	-3.790033	M.-A. Félix	2009-08-16
JU1792	JU1792	46.63278	1.064289	M.-A. Félix	2009-09-27
JU1793	JU1793	49.12604	1.95114	M.-A. Félix	2009-10-10
JU1807	JU1581	48.662134	2.2131	M.-A. Félix	2008-10-23
JU1808	JU1808	48.81257	2.395372	M.-A. Félix	2009-10-14
JU1896	JU1896	37.999722	23.749673	M. Barkoulas	2010-01-02
JU1920	JU1793	49.12604	1.95114	M.-A. Félix	2009-10-25
JU1922	JU1793	49.12604	1.95114	M.-A. Félix	2009-10-25
JU1924	JU2600	49.12604	1.95114	M.-A. Félix	2009-10-25
JU1929	JU1793	49.12604	1.95114	M.-A. Félix	2009-10-25
JU1934	JU1934	49.12604	1.95114	M.-A. Félix	2009-10-25

JU1960	CB4858	34.18973	-118.13132	J. DeModena	2008-11-30
JU2001	JU2001	-21.1	55.5	T. Béliard	2010-09-01
JU2007	JU2007	50.7608	-1.32413	M. Barkoulas	2010-10-16
JU2016	JU2016	37.757593	-122.46318	C. Nelson	2010-11-01
JU2017	JU2017	37.757593	-122.46318	C. Nelson	2010-11-01
JU2106	JU2106	43.06	0.24	M.-A. Félix	2011-07-10
JU2131	JU2131	48.0497	-4.705	M.-A. Félix	2011-08-09
JU2139	JU1793	46.63278	1.064289	M.-A. Félix	2011-10-23
JU2141	JU2141	46.6293	1.0512	M.-A. Félix	2011-10-23
JU2151	JU2600	49.121	1.951	M.-A. Félix	2011-10-31
JU2234	JU2234	47.227	-1.583	L. Frézal	2012-11-11
JU2250	JU2250	48.285278	-1.891389	L. Frézal	2012-11-15
JU2257	JU2257	46.6	1.1	M.-A. Félix	2013-08-15
JU2287	JU2257	46.6	1.1	M.-A. Félix	2013-08-15
JU2316	JU2316	38.7175	-9.1486	M.-A. Félix	2013-08-25
JU2460	JU792	48.6934	-3.9251	M.-A. Félix	2012-12-28
JU2464	JU2464	-13.155	-72.525	L. Lokmane	2013-01
JU2466	JU2466	-13.257	-72.266	L. Lokmane	2013-01
JU2467	JU2464	-13.155	-72.525	L. Lokmane	2013-01
JU2468	JU2464	-13.155	-72.525	L. Lokmane	2013-01
JU2478	JU2478	50.85	4.351	D. Thieffry	2013-02-01
JU2513	JU2513	38.26016	22.0736	M.-A. Félix	2013-05-07
JU2519	JU2519	38.7175	-9.1486	M.-A. Félix	2013-08-25
JU2522	JU2522	38.7175	-9.1486	M.-A. Félix	2013-08-25
JU2526	JU2526	38.7175	-9.1486	M.-A. Félix	2013-08-25
JU2527	JU792	47.8797	-3.5999	F. Besnard	2013-08-19
JU2534	JU2534	49.357921	0.097087	S. Marsh	2013-06-09
JU2565	JU2565	44.958394	1.066213	T. Béliard	2013-10-05
JU2566	JU2566	48.83886	2.44599	M.-A. Félix	2013-10-02
JU2570	JU2570	46.2657	-0.2685	F. Besnard	2013-11-13
JU2572	JU2572	48.81257	2.395372	S. Marsh	2013-10-01
JU2575	JU2575	49.0857	3.0707	M.-A. Félix and S. Marsh	2013-10-26
JU2576	JU2576	49.0861	3.072	M.-A. Félix and S. Marsh	2013-10-26
JU2578	JU2578	48.87613	2.4315	M.-A. Félix	2013-10-27
JU258	JU258	32.73	-16.89	M.-A. Félix	2001-10-01
JU2581	JU2581	46.6	1.1	M.-A. Félix	2013-11-03
JU2586	JU2586	48.897	2.159	A. Zalmanski	2013-11-11

JU2587	JU2587	45.026713	3.872016	A. Richaud	2013-11-10
JU2592	JU2592	48.628558	-2.403836	L. Frézal	2013-11-11
JU2593	JU2593	48.822556	2.222334	O. Bensaude	2013
JU2600	JU2600	49.1242	1.9496	M.-A. Félix and S. Marsh	2013-11-20
JU2604	JU1793	49.16477	1.86175	M.-A. Félix and S. Marsh	2013-11-20
JU2605	JU1793	49.166	1.86	M.-A. Félix and S. Marsh	2013-11-20
JU2610	JU2610	49.1075	1.7915	M.-A. Félix and S. Marsh	2013-11-20
JU2619	JU2619	32.998352	-117.27543	S. Marsh	2014-01
JU2800	JU2800	48.79	2.331	M. Casado	2014-09-01
JU2802	JU2800	48.9067	2.14167	F. Besnard	2014-09-14
JU2811	JU2811	-33.8632	151.219453	S. Marsh	2014-09-24
JU2825	JU2825	48.8092	2.3862	R. Luallen	2014-11-14
JU2828	JU2829	46.632	1.064	M.-A. Félix	2010-10-03
JU2829	JU2829	46.632	1.064	M.-A. Félix	2010-10-03
JU2830	JU2829	46.632	1.064	M.-A. Félix	2010-10-03
JU2838	JU2838	20.205961	-97.98832	A. Vargas Velazquez	2015
JU2841	JU2841	-40	176	M. Wilson	2015-03-01
JU2853	JU2853	41.19	-7.545	M. Félix and B. Félix	2015-05-01
JU2860	JU1200	52.19842	0.115365	M.-A. Félix	2015-06-06
JU2862	JU2862	52.1944	0.1264	M.-A. Félix	2015-06-06
JU2866	JU2866	34.0751	-118.4409	M.-A. Félix	2015-06-28
JU2878	JU2878	19.29732	-99.098769	A. Vargas Velazquez	2015-07-02
JU2879	JU2879	19.29732	-99.098769	A. Vargas Velazquez	2015-07-02
JU2906	JU2906	43.8023	11.2806	M.-A. Félix	2015-12-13
JU2907	JU2907	43.8021	11.2906	M.-A. Félix	2015-12-13
JU2908	JU2907	43.8063	11.2839	M.-A. Félix	2015-12-13
JU310	JU310	46.63	1.06	M.-A. Félix	2002-08-25
JU311	JU311	44.42	4.4	M.-A. Félix	2002-09-08
JU312	JU311	44.42	4.4	M.-A. Félix	2002-09-08
JU3125	JU3125	38.1127	13.3722	M.-A. Félix	2016-04-20
JU3127	JU3127	38.11196	13.37274	M.-A. Félix	2016-04-20
JU3128	JU3128	37.076	15.2763	M.-A. Félix	2016-04-23
JU3131	JU323	48.7015	2.1725	M.-A. Félix	2008-10-23
JU3132	JU3132	48.7015	2.1725	M.-A. Félix	2011-10-10
JU3133	JU1440	48.7015	2.1725	M.-A. Félix	2011-11-08
JU3134	JU3134	48.7015	2.1725	M.-A. Félix	2011-11-11
JU3135	JU3135	48.7015	2.1725	M.-A. Félix	2013-10-29

JU3136	MY2453	48.7015	2.1725	M.-A. Félix	2013-11-13
JU3137	JU3137	48.7015	2.1725	M.-A. Félix	2014-10-20
JU3138	JU2600	49.1269	1.9595	M.-A. Félix	2011-11-07
JU3139	JU1666	48.71	-3.81	M.-A. Félix	2009-08-09
JU3140	JU3140	48.71	-3.81	M.-A. Félix	2009-08-09
JU3141	JU3141	48.71	-3.81	M.-A. Félix	2009-08-09
JU3142	JU792	48.71	-3.81	M.-A. Félix	2009-08-09
JU3144	JU3144	6.18	10.52	J. David	2016-05-01
JU315	JU311	44.2	4.4	M.-A. Félix	2002-09-08
JU3166	JU3166	0.28	6.59837	M.-A. Félix	2016-09-19
JU3167	JU3167	0.289	6.612	J. David	2016-09-21
JU3169	JU3169	0.289	6.612	J. David	2016-09-21
JU3224	JU3224	-41.296186	174.784857	J. Ewbank	2017-04-01
JU3225	JU3225	-41.296186	174.784857	N. Pujol	2017-04-02
JU3226	JU3226	-41.29085	174.76872	N. Pujol	2017-04-03
JU3227	JU3228	-38.64844	176.08947	N. Pujol	2017-04-04
JU3228	JU3228	-39.02256	175.71458	N. Pujol	2017-04-05
JU323	JU323	44.42	4.4	M.-A. Félix	2002-09-08
JU3271	JU1793	49.11	1.93	M.-A. Félix and E. Troemel	NA
JU3280	JU3280	50.07182	14.42333	M.-A. Félix	2017-09-24
JU3282	JU3282	50.0711	14.42028	M.-A. Félix	2017-09-24
JU3291	JU3291	48.7679	2.70719	M.-A. Félix	2017-10-08
JU345	JU346	44.42	4.4	M.-A. Félix	2002-09-08
JU346	JU346	44.42	4.4	M.-A. Félix	2002-09-08
JU360	JU360	48.98	2.23	C. Pieau	2002-09-16
JU363	JU360	48.98	2.23	C. Pieau	2002-09-16
JU367	JU367	48.98	2.23	C. Pieau	2002-09-16
JU393	JU393	49.28	-0.32	A. Barrière	2002-09-01
JU394	JU394	49.28	-0.32	A. Barrière	2002-09-01
JU397	JU397	49.28	-0.32	A. Barrière	2002-09-01
JU406	JU406	49.28	-0.32	A. Barrière	2002-12-30
JU440	JU440	48.715	1.56	D. Baille	2003-09-12
JU561	JU561	48.71	-3.81	M.-A. Félix	2004-10-03
JU642	JU642	48.84	2.5	J.-A. Lepsant	2004-12-14
JU751	JU751	48.84	2.5	J.-A. Lepsant	2005-06-08
JU774	JU774	38.683	-9.34	M.-A. Félix	2005-07-10
JU775	JU775	38.7175	-9.1486	M.-A. Félix	2005-07-10

JU778	JU778	38.719	-9.1491	M.-A. Félix	2005-07-10
JU782	JU782	38.7191	-9.1503	M.-A. Félix	2005-07-10
JU792	JU792	43.06	0.24	M.-A. Félix	2005-08-31
JU830	JU830	48.52	9.05	R. Hong	2005-09-28
JU847	JU847	48.46	7.461	M.-A. Félix	2005-10-03
KR314	KR314	49.28	-123.13	F. Dill	1984-05-01
LKC34	LKC34	-18	46	V. Stowell	2005-06-17
MY1	MY1	52.54	7.31	H. Schulenburg	2002-07-01
MY10	MY10	51.96	7.53	H. Schulenburg	2002-07-01
MY16	MY16	51.93	7.57	H. Schulenburg	2002-07-01
MY18	MY18	51.96	7.53	H. Schulenburg	2002-07-01
MY2001	MY2453	51.950777	7.536628	C. Petersen	2012-06-20
MY2004	MY2453	51.950777	7.536628	C. Petersen	2012-06-20
MY2011	MY2453	51.950777	7.536628	C. Petersen	2012-07-04
MY2014	MY2453	51.950777	7.536628	C. Petersen	2012-07-04
MY2022	RC301	54.346355	10.117737	C. Petersen	2012-07-04
MY2024	RC301	54.346355	10.117737	C. Petersen	2012-07-04
MY2042	MY920	54.346355	10.117737	C. Petersen	2012-07-18
MY2050	MY2453	51.950777	7.536628	C. Petersen	2012-07-18
MY2051	MY2453	51.950777	7.536628	C. Petersen	2012-07-18
MY2054	MY2453	51.950777	7.536628	C. Petersen	2012-07-18
MY2078	RC301	54.346355	10.117737	C. Petersen	2012-08-01
MY2097	MY920	54.346355	10.117737	C. Petersen	2012-08-15
MY2099	MY795	54.346355	10.117737	C. Petersen	2012-08-15
MY2109	MY2741	54.346355	10.117737	C. Petersen	2012-08-15
MY2121	MY2453	51.950777	7.536628	C. Petersen	2012-08-15
MY2137	MY2453	51.950777	7.536628	C. Petersen	2012-09-17
MY2138	MY920	54.346355	10.117737	C. Petersen	2012-09-17
MY2142	MY2573	51.950723	7.599099	C. Petersen	2012-09-17
MY2143	MY2147	54.346355	10.117737	C. Petersen	2012-09-17
MY2144	MY2573	51.950723	7.599099	C. Petersen	2012-09-17
MY2147	MY2147	54.346355	10.117737	C. Petersen	2012-09-17
MY2198	MY2573	51.950723	7.599099	C. Petersen	2012-09-26
MY2199	MY2453	51.950777	7.536628	C. Petersen	2012-09-26
MY2208	MY2573	54.346355	10.117737	C. Petersen	2012-09-26
MY2212	MY2212	54.346355	10.117737	C. Petersen	2012-09-26
MY2224	MY2573	54.346355	10.117737	C. Petersen	2012-09-26

MY2239	MY2573	54.346355	10.117737	C. Petersen	2012-09-26
MY2282	MY2573	51.950723	7.599099	C. Petersen	2012-10-10
MY2288	MY2453	51.950777	7.536628	C. Petersen	2012-10-10
MY2291	RC301	54.346355	10.117737	C. Petersen	2012-10-10
MY2294	MY2573	51.950723	7.599099	C. Petersen	2012-10-10
MY23	MY23	51.96	7.53	H. Schulenburg	2002-07-01
MY2338	MY2573	51.950723	7.599099	C. Petersen	2012-10-24
MY2339	MY2453	51.950777	7.536628	C. Petersen	2012-10-24
MY2344	MY2535	51.950723	7.599099	C. Petersen	2012-10-24
MY2347	MY920	54.346355	10.117737	C. Petersen	2012-10-24
MY2373	MY920	54.346355	10.117737	C. Petersen	2012-10-24
MY2406	MY920	54.346355	10.117737	C. Petersen	2012-10-24
MY2434	MY2573	51.950723	7.599099	C. Petersen	2012-11-07
MY2443	MY2573	51.950723	7.599099	C. Petersen	2012-11-07
MY2453	MY2453	51.950777	7.536628	C. Petersen	2012-11-07
MY2479	MY920	54.346355	10.117737	C. Petersen	2012-11-21
MY2481	JU311	54.346355	10.117737	C. Petersen	2012-11-21
MY2491	MY2573	51.950723	7.599099	C. Petersen	2012-11-21
MY2502	MY2453	51.950777	7.536628	C. Petersen	2012-11-21
MY2530	MY2530	54.346355	10.117737	C. Petersen	2012-12-05
MY2532	MY2535	54.346355	10.117737	C. Petersen	2012-12-05
MY2535	MY2535	51.950723	7.599099	C. Petersen	2012-12-05
MY2541	MY2453	51.950777	7.536628	C. Petersen	2012-12-05
MY2573	MY2573	51.950723	7.599099	C. Petersen	2012-12-10
MY2579	MY2453	51.950777	7.536628	C. Petersen	2012-12-10
MY2585	MY2585	54.346355	10.117737	C. Petersen	2012-12-10
MY2622	MY2453	54.3491	10.11505	R. Hermann	2013-08-09
MY2623	MY2585	54.3491	10.11505	C. Petersen	2013-08-09
MY2630	RC301	54.3491	10.11505	R. Hermann	2013-08-09
MY2635	MY2713	54.3491	10.11505	R. Hermann	2013-08-23
MY2636	RC301	54.3491	10.11505	R. Hermann	2013-08-23
MY2640	RC301	54.3491	10.11505	R. Hermann	2013-08-23
MY2679	MY2713	54.3491	10.11505	R. Hermann	2013-09-04
MY2681	RC301	54.3491	10.11505	C. Petersen	2013-09-04
MY2684	RC301	54.3491	10.11505	M. Barg	2013-08-19
MY2685	MY2693	54.3491	10.11505	M. Barg	2013-08-19
MY2688	MY920	54.3491	10.11505	M. Barg	2013-08-21

MY2689	MY2713	54.3491	10.11505	M. Barg	2013-08-21
MY2691	RC301	54.3491	10.11505	R. Hermann	2013-07-31
MY2692	MY2741	54.3491	10.11505	R. Hermann	2013-08-16
MY2693	MY2693	54.3491	10.11505	R. Hermann	2013-08-15
MY2713	MY2713	54.3491	10.11505	M. Barg	2013-09-03
MY2719	MY2693	54.3491	10.11505	M. Barg	2013-09-05
MY2741	MY2741	54.3491	10.11505	C. Petersen	2014-09-01
MY508	MY2453	51.950777	7.536628	C. Petersen	2011-07-08
MY518	MY518	51.964154	7.611719	C. Petersen	2011-07-08
MY524	MY2453	51.950777	7.536628	C. Petersen	2011-11-28
MY538	MY795	54.346355	10.117737	C. Petersen	2011-08-25
MY559	MY2573	51.950723	7.599099	C. Petersen	2011-09-09
MY561	MY2453	51.950777	7.536628	C. Petersen	2011-09-08
MY564	MY2453	51.950777	7.536628	C. Petersen	2011-09-08
MY570	MY2453	51.950777	7.536628	C. Petersen	2011-09-08
MY579	MY2573	51.950723	7.599099	C. Petersen	2011-09-09
MY589	MY920	54.346355	10.117737	C. Petersen	2011-08-25
MY673	MY795	54.346355	10.117737	C. Petersen	2011-09-27
MY679	MY679	54.346355	10.117737	C. Petersen	2011-09-27
MY684	RC301	54.346355	10.117737	C. Petersen	2011-09-27
MY710	MY2573	51.950723	7.599099	C. Petersen	2011-10-12
MY713	MY2453	51.950777	7.536628	C. Petersen	2011-10-12
MY741	MY920	54.346355	10.117737	C. Petersen	2011-10-10
MY772	MY772	54.346355	10.117737	C. Petersen	2011-09-27
MY792	MY2453	51.950777	7.536628	C. Petersen	2011-10-24
MY795	MY795	54.346355	10.117737	C. Petersen	2011-10-26
MY803	MY2713	54.346355	10.117737	C. Petersen	2011-11-03
MY804	MY2573	51.950723	7.599099	C. Petersen	2011-11-02
MY819	MY2453	51.950777	7.536628	C. Petersen	2011-11-02
MY864	MY2453	51.950723	7.599099	C. Petersen	2011-11-14
MY881	MY2535	51.950723	7.599099	C. Petersen	2011-12-01
MY882	RC301	54.346355	10.117737	C. Petersen	2011-12-01
MY887	MY920	54.346355	10.117737	C. Petersen	2011-12-08
MY904	MY2453	51.950777	7.536628	C. Petersen	2011-12-08
MY920	MY920	54.346355	10.117737	C. Petersen	2012-01-18
MY934	MY2573	51.950723	7.599099	C. Petersen	2012-01-25
MY965	MY2453	51.950777	7.536628	C. Petersen	2012-05-09

MY990	MY920	54.346355	10.117737	C. Petersen	2012-05-23
MY991	MY679	54.346355	10.117737	C. Petersen	2012-06-20
N2	N2	51.45	-2.59	W. Nicholas	1951
NIC1	NIC1	43.279	5.3543	C. Braendle	2008-09-14
NIC1049	NIC1049	43.593561	1.45032	C. Braendle	2014-10-14
NIC1107	NIC1107	43.716278	7.266935	A. Vielle and P. Vigne	2014-11-25
NIC1119	NIC1119	-13.421743	-71.849508	C. Braendle	2015-06-04
NIC1604	MY2573	38.596	-0.0859	C. Braendle	2017-05-01
NIC166	NIC166	46.72722	6.89775	C. Braendle	2007-07-27
NIC195	NIC195	38.545874	-28.37322	D. Bourc'his and J. Dumont	2011-08-22
NIC196	NIC195	38.4716405	-28.20149	D. Bourc'his and J. Dumont	2011-08-23
NIC197	NIC195	38.39682	-28.25165	D. Bourc'his and J. Dumont	2011-08-23
NIC198	NIC195	39.4364016	-31.23849	D. Bourc'his and J. Dumont	2011-08-29
NIC199	NIC199	37.745428	-25.19929	D. Bourc'his and J. Dumont	2011-03-09
NIC2	NIC2	43.279	5.3543	C. Braendle	2008-09-14
NIC200	NIC199	37.74942	-25.66489	D. Bourc'his and J. Dumont	2011-05-09
NIC207	NIC207	43.720505	7.24045	C. Braendle	2011-09-21
NIC231	NIC231	43.720505	7.24045	C. Braendle	2011-11-14
NIC232	NIC231	43.720505	7.24045	C. Braendle	2011-11-14
NIC236	NIC236	39.242006	-9.313417	C. Braendle	2011-11-26
NIC237	NIC236	39.242006	-9.313417	C. Braendle	2011-11-26
NIC242	NIC242	38.691765	-9.31609	C. Braendle	2008-08-17
NIC251	NIC251	38.66621	-28.151364	S. Carvalho	2012-08-01
NIC252	NIC252	38.661313	-28.147949	S. Carvalho	2012-08-01
NIC255	NIC255	43.714834	7.266779	C. Braendle	2012-11-18
NIC256	NIC256	38.71829	-9.14875	C. Braendle	2012-12-02
NIC258	NIC258	38.71829	-9.14875	C. Braendle	2012-12-02
NIC259	NIC259	38.71829	-9.14875	C. Braendle	2012-12-02
NIC260	NIC260	38.71829	-9.14875	C. Braendle	2012-12-02
NIC261	NIC261	38.71829	-9.14875	C. Braendle	2012-12-02
NIC262	NIC262	38.71829	-9.14875	C. Braendle	2012-12-02
NIC263	NIC256	38.71829	-9.14875	C. Braendle	2012-12-02
NIC265	NIC265	38.71829	-9.14875	C. Braendle	2012-12-02
NIC266	NIC266	38.69237	-9.31592	C. Braendle	2012-12-07
NIC267	NIC267	38.69237	-9.31592	C. Braendle	2012-12-07
NIC268	NIC268	38.69237	-9.31592	C. Braendle	2012-12-07
NIC269	NIC269	38.69237	-9.31592	C. Braendle	2012-12-07

NIC270	NIC270	38.69237	-9.31592	C. Braendle	2012-12-07
NIC271	NIC271	38.69237	-9.31592	C. Braendle	2012-12-07
NIC272	NIC272	39.769459	-8.756356	C. Braendle	2012-12-09
NIC273	NIC272	39.769459	-8.756356	C. Braendle	2012-12-09
NIC274	NIC274	39.769459	-8.756356	C. Braendle	2012-12-09
NIC275	NIC275	39.769459	-8.756356	C. Braendle	2012-12-09
NIC276	NIC276	39.769459	-8.756356	C. Braendle	2012-12-09
NIC277	NIC277	43.716441	7.266138	C. Braendle	2012-12-15
NIC3	NIC3	43.3636	5.3215	C. Braendle	2008-09-28
NIC4	NIC3	43.3636	5.3215	C. Braendle	2008-09-28
NIC501	NIC501	48.77302	2.2675	C. Braendle	2013-09-14
NIC508	MY2535	40.86183	14.261756	C. Braendle	2013-11-14
NIC511	NIC511	40.8625	14.2623855	C. Braendle	2013-11-14
NIC512	MY2535	40.8625	14.2623855	C. Braendle	2013-11-14
NIC513	NIC513	38.776038	-9.167136	C. Braendle	2013-11-30
NIC514	NIC514	38.776038	-9.167136	C. Braendle	2013-11-30
NIC515	NIC515	38.776775	-9.165884	C. Braendle	2013-11-30
NIC521	NIC527	36.535679	-6.304441	C. Braendle	2014-04-01
NIC522	NIC522	36.535679	-6.304441	C. Braendle	2014-04-01
NIC523	NIC523	36.535679	-6.29831	C. Braendle	2014-04-01
NIC526	NIC526	36.535679	-6.304441	C. Braendle	2014-04-01
NIC527	NIC527	36.535679	-6.304441	C. Braendle	2014-04-01
NIC528	NIC528	36.535679	-6.29831	C. Braendle	2014-04-01
NIC529	NIC529	37.870754	-4.784967	C. Braendle	2014-05-01
PB303	PB303	NA	NA	S. Baird	1998-11-14
PS2025	PS2025	34.19	-118.13	J. DeModena	NA
PX179	PX179	44.035	-123.058	B. White	2001-10-02
QG2075	QG2075	33.951	-83.376	M. Rockman	2013-02-20
QG2810	QG2811	-35.2542	149.1151	M. Rockman	2017-04-02
QG2811	QG2811	-35.2542	149.1151	M. Rockman	2017-04-02
QG2812	QG2813	-34.6342	150.7279	M. Rockman	2017-03-30
QG2813	QG2813	-34.6342	150.7279	M. Rockman	2017-03-28
QG2818	QG2818	-28.0474	152.3936	M. Rockman	2017-04-12
QG2823	QG2823	-34.4511	116.033	M. Rockman	2017-05-23
QG2824	QG2824	-34.4511	116.033	M. Rockman	2017-05-23
QG2825	QG2825	-34.4511	116.0328	M. Rockman	2017-05-23
QG2826	QG2823	-34.4511	116.0328	M. Rockman	2017-05-23

QG2827	QG2827	-31.9547	115.8446	M. Rockman	2017-05-24
QG2828	QG2828	-31.9547	115.8446	M. Rockman	2017-05-24
QG2829	QG2827	-31.9547	115.8446	M. Rockman	2017-05-24
QG2830	QG2832	-27.3311	152.7636	M. Rockman	2017-05-31
QG2831	QG2832	-27.3311	152.7636	M. Rockman	2017-05-31
QG2832	QG2832	-27.3311	152.7636	M. Rockman	2017-05-30
QG2833	QG2832	-27.3311	152.7636	M. Rockman	2017-05-30
QG2834	QG2835	-27.3308	152.7592	M. Rockman	2017-05-30
QG2835	QG2835	-27.3308	152.7592	M. Rockman	2017-05-30
QG2836	QG2836	-27.3308	152.7592	M. Rockman	2017-06-01
QG2837	QG2837	-27.3308	152.7592	M. Rockman	2017-06-02
QG2838	QG2838	-27.3311	152.7636	M. Rockman	2017-06-02
QG2839	QG2841	-28.2446	153.2089	M. Rockman	2017-06-06
QG2840	QG2841	-28.2446	153.2089	M. Rockman	2017-06-06
QG2841	QG2841	-28.2446	153.2063	M. Rockman	2017-06-06
QG2842	QG2841	-28.2446	153.2063	M. Rockman	2017-06-06
QG2843	QG2843	-28.2402	153.195	M. Rockman	2017-06-09
QG2844	QG2846	-28.2043	153.1907	M. Rockman	2017-06-06
QG2845	QG2846	-28.2043	153.1907	M. Rockman	2017-06-06
QG2846	QG2846	-28.2043	153.1907	M. Rockman	2017-06-06
QG2850	QG2850	-28.0845	152.5074	M. Rockman	2017-06-22
QG2851	QG2850	-28.0845	152.5074	M. Rockman	2017-06-22
QG2852	QG2854	-28.0826	152.5066	M. Rockman	2017-06-25
QG2853	QG2854	-28.0826	152.5066	M. Rockman	2017-06-25
QG2854	QG2854	-28.0806	152.5046	M. Rockman	2017-06-22
QG2855	QG2855	-28.0806	152.5046	M. Rockman	2017-06-22
QG2856	QG2854	-28.0806	152.5044	M. Rockman	2017-06-20
QG2857	QG2857	-28.0806	152.5044	M. Rockman	2017-06-20
QG2858	QG2854	-28.0801	152.5041	M. Rockman	2017-06-20
QG2859	QG2854	-28.0801	152.5041	M. Rockman	2017-06-20
QG2872	QG2873	-27.369	152.1831	M. Rockman	2017-06-25
QG2873	QG2873	-27.369	152.1831	M. Rockman	2017-06-26
QG2874	QG2874	-27.3686	152.1838	M. Rockman	2017-06-28
QG2875	QG2875	-27.3672	152.1834	M. Rockman	2017-06-27
QG2876	QG2875	-27.3672	152.1834	M. Rockman	2017-06-27
QG2877	QG2877	-27.367	152.183	M. Rockman	2017-06-28
QG2878	QG2877	-27.367	152.183	M. Rockman	2017-06-28

QG2927	QG2932	-28.0538	152.3952	M. Rockman	2017-07-26
QG2928	QG2932	-28.0538	152.3952	M. Rockman	2017-07-26
QG2931	QG2932	-28.0538	152.3952	M. Rockman	2017-07-26
QG2932	QG2932	-28.0538	152.3952	M. Rockman	2017-07-26
QG536	QG536	37.7679	-122.4415	M. Rockman	2010-12-30
QG537	QG536	37.7679	-122.4415	M. Rockman	2010-12-30
QG538	QG536	37.7679	-122.4415	M. Rockman	2010-12-30
QG556	QG556	34.421629	-119.70202	A. Paaby	2011-06-27
QG557	QG557	34.421629	-119.70202	A. Paaby	2011-06-27
QG558	QG556	34.421629	-119.70202	A. Paaby	2011-06-27
QW947	QW947	-33.4213	-70.6106	M. Alkema	2013-04-12
QX1211	QX1211	37.7502	-122.4331	M. Rockman	2007-11-26
QX1212	QX1212	37.7502	-122.4331	M. Rockman	2007-11-26
QX1213	QX1212	37.7502	-122.4331	M. Rockman	2007-11-26
QX1214	QX1212	37.7502	-122.4331	M. Rockman	2007-11-26
QX1215	QX1211	37.7502	-122.4331	M. Rockman	2007-11-26
QX1216	QX1211	37.7502	-122.4331	M. Rockman	2007-11-26
QX1233	QX1233	37.8804	-122.2838	M. Rockman	2007-11-24
QX1791	QX1791	20.6344	-156.3935	E. Andersen	2011-01-27
QX1792	QX1792	20.70554	-156.35475	E. Andersen	2011-01-28
QX1793	QX1793	20.70559	-156.35678	E. Andersen	2011-01-28
QX1794	QX1794	20.70559	-156.35678	E. Andersen	2011-01-28
RC301	RC301	47.99	7.84	R. Cassada	1983
WN2001	WN2001	51.954422	6.303406	J. Riksen	2008-06-26
WN2002	WN2002	51.975285	5.694834	J. Riksen	2007-11-20
WN2010	WN2001	51.954422	6.303406	J. Riksen	2008-06-26
WN2011	WN2001	51.954422	6.303406	J. Riksen	2008-06-26
WN2013	WN2001	51.954422	6.303406	J. Riksen	2008-06-26
WN2014	WN2001	51.954422	6.303406	J. Riksen	2008-06-26
WN2016	WN2001	51.954422	6.303406	J. Riksen	2008-06-26
WN2017	WN2001	51.954422	6.303406	J. Riksen	2008-06-26
WN2018	WN2001	51.954422	6.303406	J. Riksen	2008-06-26
WN2019	WN2001	51.954422	6.303406	J. Riksen	2008-06-26
WN2020	WN2001	51.954422	6.303406	J. Riksen	2008-06-26
WN2021	WN2001	51.954422	6.303406	J. Riksen	2008-06-26
WN2033	WN2033	51.975	5.694	J. Riksen	2014-11-05
WN2035	WN2033	51.975	5.694	J. Riksen	2014-11-05

WN2039	WN2033	51.975	5.694	J. Riksen	2014-11-05
WN2050	WN2050	51.975	5.717	J. Riksen	2014-11-11
WN2056	WN2050	51.975	5.717	J. Riksen	2014-11-11
WN2059	WN2066	51.975306	5.694904	M. Sterken	2016-10-11
WN2060	WN2066	51.975306	5.694904	M. Sterken	2016-10-11
WN2062	WN2050	51.975196	5.718727	M. Sterken	2016-10-11
WN2063	WN2063	51.974975	5.651316	M. Gultom	2016-10-11
WN2064	WN2064	51.974703	5.68639	M. van Wijk	2016-10-11
WN2065	WN2066	51.975306	5.694904	Y. Huang	2016-10-11
WN2066	WN2066	51.975306	5.694904	Y. Huang	2016-10-11
XZ1513	XZ1513	22.14787	-159.63105	M. Ailion	2014-10-08
XZ1514	XZ1514	22.149	-159.668	M. Ailion	2014-10-15
XZ1515	XZ1515	22.149	-159.668	M. Ailion	2014-10-15
XZ1516	XZ1516	22.149	-159.668	M. Ailion	2014-10-15
XZ1672	XZ1672	47.687741	-122.30051	B. Coleman	2015-08-01
XZ1734	XZ1734	-23.5	-46.7	M. Ailion	2015-11-15
XZ1735	XZ1735	-22.9	-46.7	M. Ailion	2015-11-07
XZ1756	XZ1756	47.623232	-122.30732	P. Lamelza	2015-10-24
XZ2018	XZ2018	NA		M. Ailion	2016-10-01
XZ2019	XZ2019	47.636483	-122.30589	M. Ailion	2016-10-25
XZ2020	XZ2020	46.3	-120	A. Nassar	2016-10-01

Supplementary Table 2 | Distances among wild strains that belong to the same isotype

The geographic information of 14 isotypes that were sampled multiple times from locations at least 50 km apart is shown.

Strain	Isotype	Latitude	Longitude	Isotype strain counts	Is reference	Distance to reference strain (km)
AB4	ECA251	-34.93	138.59	2	FALSE	13170.5973987643
ECA251	ECA251	34.1	-118.1	2	TRUE	NA
JU1200	JU1200	55.577	-4.6	2	TRUE	NA
JU2860	JU1200	52.19842	0.115365	2	FALSE	487.152613837801
JU1440	JU1440	41.41307	2.15231	2	TRUE	NA
JU3133	JU1440	48.7015	2.1725	2	FALSE	809.98596260867
JU1793	JU1793	49.12604	1.95114	2	TRUE	NA
JU2139	JU1793	46.63278	1.064289	2	FALSE	285.040917449512
JU311	JU311	44.42	4.4	2	TRUE	NA
MY2481	JU311	54.346355	10.117737	2	FALSE	1178.49124674857
JU3227	JU3228	-38.64844	176.08947	2	FALSE	52.767605399004
JU3228	JU3228	-39.02256	175.71458	2	TRUE	NA
JU3131	JU323	48.7015	2.1725	2	FALSE	505.599584406246
JU323	JU323	44.42	4.4	2	TRUE	NA
JU2527	JU792	47.8797	-3.5999	3	FALSE	613.897518387652
JU3142	JU792	48.71	-3.81	3	FALSE	702.031724447556
JU792	JU792	43.06	0.24	3	TRUE	NA
BRC20231	MY23	23.541517	120.908112	2	FALSE	9447.77982000758
MY23	MY23	51.96	7.53	2	TRUE	NA
JU3136	MY2453	48.7015	2.1725	3	FALSE	525.612240370477
MY2453	MY2453	51.950777	7.536628	3	TRUE	NA
MY2622	MY2453	54.3491	10.11505	3	FALSE	317.753858523063
MY2532	MY2535	54.346355	10.117737	3	FALSE	315.352444531987
MY2535	MY2535	51.950723	7.599099	3	TRUE	NA
NIC508	MY2535	40.86183	14.261756	3	FALSE	1333.4739542811
ECA552	MY2573	43.8658	5.0628	4	FALSE	918.573851024173
MY2208	MY2573	54.346355	10.117737	4	FALSE	315.352444531987
MY2573	MY2573	51.950723	7.599099	4	TRUE	NA
NIC1604	MY2573	38.596	-0.0859	4	FALSE	1599.85744272238
NIC195	NIC195	38.545874	-28.37322	2	TRUE	NA
NIC198	NIC195	39.4364016	-31.23849	2	FALSE	267.18451568098
MY2024	RC301	54.346355	10.117737	2	FALSE	724.773320793207
RC301	RC301	47.99	7.84	2	TRUE	NA

Supplementary Table 3 | Distribution of swept haplotype and hyper-divergent genome across wild *C. elegans* isotypes

The variant distribution for the 328 *C. elegans* isotypes is shown. The geographic origin of the isotype is shown in the second column. The fraction swept columns refer to the fraction of chromosomes I, IV, V, and X that each strain shares with the most abundant haplotype (Methods). The hyper-divergent genome column refers to the amount of genome (kb) that was classified as hyper-divergent and the fraction hyper-divergent fraction column is the fraction of the genome that is classified as hyper-divergent. The genome-wide variants column represents the total number of ALT variant calls for each isotype, and the divergent-region variants column shows the number of variants localized to hyper-divergent regions. Finally, the fraction divergent-region variants column shows the fraction of total variants that are localized to the hyper-divergent regions.

Isotype reference strain	Origin	Fraction swept (I, IV, V, X)				Hyper-divergent genome (kb)	Fraction hyper-divergent	Genome-wide variants	Divergent-region variants	Fraction divergent-region variants
AB1	Australia	0.695	0.601	0.805	0.761	1162	0.012	92517	23363	0.253
BRC20067	Asia	0.300	1.000	0.904	1.000	826	0.008	89685	10905	0.122
BRC20263	Australia	0.323	0.735	0.367	0.690	2000	0.020	153922	39114	0.254
CB4852	Unknown	0.817	0.904	0.904	0.588	528	0.005	67966	10002	0.147
CB4854	N. America	0.407	0.853	0.903	0.653	980	0.010	98343	14154	0.144
CB4856	Hawaii	0.000	0.000	0.000	0.000	3224	0.032	242577	58514	0.241
CB4932	Europe	0.262	0.000	0.768	0.058	710	0.007	88756	13888	0.156
CX11254	N. America	0.000	0.870	0.313	0.272	2001	0.020	136736	35033	0.256
CX11262	N. America	0.000	0.655	0.263	0.170	2137	0.021	165389	41765	0.253
CX11264	N. America	0.237	0.561	0.234	0.000	2112	0.021	177791	43398	0.244
CX11271	N. America	0.237	0.565	0.792	0.306	667	0.007	109851	12986	0.118
CX11276	N. America	0.646	0.742	0.717	0.327	1804	0.018	117544	26202	0.223
CX11285	N. America	0.096	0.555	0.129	0.361	2173	0.022	169882	35749	0.210
CX11292	N. America	0.318	0.743	0.904	0.306	682	0.007	97849	12768	0.130
CX11307	N. America	0.222	0.973	0.241	0.217	2026	0.020	149073	43265	0.290
CX11314	N. America	0.311	0.740	0.282	0.306	2139	0.021	147343	38304	0.260
CX11315	N. America	0.096	0.561	0.663	0.553	2121	0.021	134796	37884	0.281
DL200	Africa	0.693	0.759	0.682	0.000	1258	0.013	123175	17745	0.144
DL226	N. America	0.187	0.768	0.805	0.618	2039	0.020	143436	32910	0.229
DL238	Hawaii	0.000	0.000	0.000	0.000	3206	0.032	260360	69449	0.267
ECA189	Hawaii	0.000	0.000	0.000	0.000	2987	0.030	231297	58893	0.255
ECA191	Hawaii	0.000	0.000	0.000	0.000	3856	0.038	426268	80204	0.188
ECA243	Europe	0.292	0.000	0.640	0.134	510	0.005	61864	13801	0.223
ECA246	N. America	0.631	0.765	0.904	0.500	1387	0.014	108790	19480	0.179
ECA248	N. America	0.237	0.381	0.655	0.222	1379	0.014	130786	21273	0.163
ECA250	N. America	0.177	0.743	0.902	0.139	1516	0.015	102241	17874	0.175
ECA251	N. America	0.318	0.743	0.904	0.306	1339	0.013	112507	19243	0.171

ECA259	Unknown	0.096	0.743	0.106	0.092	1739	0.017	159112	33239	0.209
ECA347	Hawaii	0.000	0.000	0.000	0.000	4592	0.046	463961	99679	0.215
ECA348	N. America	0.081	0.432	0.127	0.000	2417	0.024	202138	49636	0.246
ECA349	N. America	0.318	0.593	0.682	0.136	1589	0.016	138595	27144	0.196
ECA36	New Zealand	0.000	0.000	0.000	0.000	5262	0.052	483212	123370	0.255
ECA363	Hawaii	0.000	0.000	0.000	0.000	4813	0.048	459879	105428	0.229
ECA369	Hawaii	0.000	0.000	0.000	0.000	7670	0.076	386353	194678	0.504
ECA372	Hawaii	0.000	0.000	0.000	0.000	2925	0.029	219397	53775	0.245
ECA396	Hawaii	0.000	0.000	0.000	0.000	4138	0.041	445019	89316	0.201
ECA592	N. America	0.000	0.000	0.286	0.171	2007	0.020	194179	36248	0.187
ECA593	N. America	0.000	0.163	0.000	0.000	2723	0.027	238820	51048	0.214
ECA594	N. America	0.154	0.102	0.097	0.329	2504	0.025	207667	48082	0.232
ECA640	N. America	0.279	0.443	0.079	0.524	1857	0.019	168016	43341	0.258
ECA701	Hawaii	0.000	0.000	0.000	0.000	9903	0.099	580298	258199	0.445
ECA703	Hawaii	0.000	0.000	0.000	0.000	2809	0.028	257175	53718	0.209
ECA705	Hawaii	0.000	0.000	0.000	0.000	3070	0.031	235110	55849	0.238
ECA706	Hawaii	0.000	0.000	0.000	0.000	2441	0.024	243854	51853	0.213
ECA710	Hawaii	0.000	0.000	0.000	0.000	2485	0.025	226762	50729	0.224
ECA712	Hawaii	0.000	0.000	0.000	0.000	2884	0.029	225399	50786	0.225
ECA722	Hawaii	0.000	0.000	0.000	0.000	3615	0.036	444068	79778	0.180
ECA723	Hawaii	0.000	0.000	0.000	0.000	3366	0.034	431904	72976	0.169
ECA724	Hawaii	0.000	0.000	0.000	0.000	4326	0.043	437044	91298	0.209
ECA730	Hawaii	0.000	0.000	0.000	0.000	2966	0.030	420411	63875	0.152
ECA732	Hawaii	0.000	0.000	0.000	0.000	3017	0.030	256960	66813	0.260
ECA733	Hawaii	0.000	0.000	0.000	0.000	3001	0.030	250557	62046	0.248
ECA738	Hawaii	0.000	0.000	0.000	0.000	2422	0.024	227308	48817	0.215
ECA740	Hawaii	0.000	0.000	0.000	0.000	4939	0.049	486776	119954	0.246
ECA741	Hawaii	0.000	0.000	0.000	0.000	4907	0.049	480385	110565	0.230
ECA742	Hawaii	0.000	0.000	0.000	0.000	5538	0.055	498928	133335	0.267
ECA743	Hawaii	0.000	0.000	0.121	0.000	2373	0.024	225101	48674	0.216
ECA744	Hawaii	0.000	0.000	0.000	0.000	3377	0.034	426617	73389	0.172
ECA745	Hawaii	0.000	0.000	0.000	0.000	3776	0.038	440983	83326	0.189
ECA746	Hawaii	0.000	0.000	0.000	0.000	3446	0.034	434102	77631	0.179
ECA760	Hawaii	0.000	0.000	0.000	0.000	2124	0.021	226120	44842	0.198
ECA768	Hawaii	0.000	0.000	0.000	0.000	2391	0.024	236885	51418	0.217
ECA777	Hawaii	0.000	0.000	0.000	0.000	2030	0.020	225133	43788	0.194
ECA778	Hawaii	0.000	0.000	0.000	0.000	2287	0.023	223197	48527	0.217

ECA807	Hawaii	0.000	0.000	0.000	0.000	2737	0.027	241101	47559	0.197
ECA812	Hawaii	0.000	0.000	0.000	0.000	2753	0.027	226067	48104	0.213
ECA923	Hawaii	0.073	0.657	0.536	0.170	2563	0.026	166996	42958	0.257
ECA928	Hawaii	0.073	0.434	0.204	0.000	2360	0.024	188816	43662	0.231
ECA930	Asia	0.237	0.562	0.770	0.170	1970	0.020	132581	30552	0.230
ED3005	Europe	0.351	0.562	0.770	0.170	2060	0.021	137514	32800	0.239
ED3011	Europe	0.318	0.443	0.901	0.611	2088	0.021	113708	24193	0.213
ED3012	Europe	0.292	0.803	0.904	0.616	841	0.008	47914	13894	0.290
ED3017	Europe	0.749	0.825	0.710	0.485	1147	0.011	115601	20291	0.176
ED3040	Africa	0.073	0.645	0.674	0.756	998	0.010	121638	14838	0.122
ED3046	Africa	0.206	0.153	0.465	0.256	2045	0.020	152355	34163	0.224
ED3048	Africa	0.874	0.882	0.901	0.992	875	0.009	91113	13063	0.143
ED3049	Africa	0.206	0.153	0.465	0.256	2049	0.020	152132	34228	0.225
ED3052	Africa	0.900	0.228	0.763	0.500	1035	0.010	119790	19286	0.161
ED3073	Africa	0.384	1.000	0.811	0.871	1029	0.010	115599	15888	0.137
ED3077	Africa	0.900	1.000	0.588	0.992	1500	0.015	130076	25604	0.197
EG4347	N. America	0.197	0.765	0.904	0.471	650	0.006	48038	8338	0.174
EG4349	N. America	0.410	0.072	0.394	0.611	1946	0.019	172747	37824	0.219
EG4724	Europe	0.703	0.292	0.342	0.508	1900	0.019	163976	36931	0.225
EG4725	Europe	0.277	0.164	0.218	0.421	3000	0.030	206758	61174	0.296
EG4946	N. America	0.368	0.797	0.904	0.530	1178	0.012	89578	18468	0.206
GXW1	Asia	0.287	0.532	0.953	0.727	960	0.010	118217	19965	0.169
JT11398	N. America	0.193	0.738	0.868	0.489	566	0.006	85909	9837	0.115
JU1088	Asia	0.302	1.000	0.904	0.959	1961	0.020	105264	28900	0.275
JU1172	S. America	0.318	0.743	0.872	0.306	1342	0.013	112780	20476	0.182
JU1200	Europe	0.292	0.863	0.904	0.710	61	0.001	21836	1155	0.053
JU1212	Europe	0.098	0.000	0.438	0.134	1735	0.017	102086	31593	0.309
JU1213	Europe	0.621	0.000	0.431	0.192	1896	0.019	134478	30788	0.229
JU1242	Europe	0.532	0.604	0.740	0.000	892	0.009	117997	15018	0.127
JU1246	Europe	0.194	0.000	0.644	0.117	1157	0.012	121086	19486	0.161
JU1249	Europe	0.382	0.897	0.904	0.134	429	0.004	33832	8988	0.266
JU1395	Europe	0.823	0.811	0.904	0.588	615	0.006	66203	9305	0.141
JU1400	Europe	0.229	0.825	0.538	0.186	2282	0.023	175806	49100	0.279
JU1409	Europe	0.413	0.461	0.868	0.545	810	0.008	105797	13291	0.126
JU1440	Europe	0.629	0.538	0.800	0.667	1113	0.011	98731	21867	0.221
JU1491	Europe	0.590	0.000	0.701	0.400	1285	0.013	137678	26518	0.193
JU1530	Europe	0.402	0.885	0.774	0.202	780	0.008	108829	13397	0.123

JU1543	Europe	0.808	0.729	0.822	0.749	269	0.003	38858	6847	0.176
JU1568	Europe	0.292	0.526	0.820	0.297	128	0.001	34873	1569	0.045
JU1580	Europe	0.531	0.000	0.000	0.000	2548	0.025	209856	56063	0.267
JU1581	Europe	0.000	0.000	0.768	0.000	1052	0.010	148575	21400	0.144
JU1586	Europe	0.292	0.653	0.816	0.562	384	0.004	42094	7876	0.187
JU1652	S. America	0.692	0.121	0.718	0.936	1848	0.018	121191	28738	0.237
JU1666	Europe	0.627	0.000	0.652	0.000	1471	0.015	145236	23121	0.159
JU1792	Europe	0.292	0.536	0.756	0.058	812	0.008	83277	16110	0.193
JU1793	Europe	0.535	0.000	0.000	0.000	2749	0.027	206545	57040	0.276
JU1808	Europe	0.278	0.443	0.808	0.149	984	0.010	111766	16386	0.147
JU1896	Europe	0.000	0.000	0.868	0.791	1458	0.015	117869	25535	0.217
JU1934	Europe	0.506	0.000	0.740	0.058	1010	0.010	121568	18708	0.154
JU2001	Africa	0.516	0.000	0.473	0.000	2121	0.021	187815	43047	0.229
JU2007	Europe	0.264	0.656	0.622	0.638	955	0.010	123027	19470	0.158
JU2016	N. America	0.318	0.743	0.904	0.306	1220	0.012	105254	17098	0.162
JU2017	N. America	0.215	0.306	0.682	0.516	1597	0.016	151825	27993	0.184
JU2106	Europe	0.506	0.000	0.000	0.000	1973	0.020	165575	41744	0.252
JU2131	Europe	0.627	0.000	0.600	0.000	1470	0.015	149803	24404	0.163
JU2141	Europe	0.506	0.000	0.740	0.058	894	0.009	120359	15366	0.128
JU2234	Europe	0.435	0.063	0.768	0.807	991	0.010	116614	20118	0.173
JU2250	Europe	0.497	0.000	0.692	0.000	824	0.008	136220	15054	0.111
JU2257	Europe	0.292	0.093	0.771	0.134	262	0.003	47142	6514	0.138
JU2316	Europe	0.263	0.000	0.058	0.278	3271	0.033	257407	68021	0.264
JU2464	S. America	0.775	0.563	0.904	0.488	1623	0.016	122126	22039	0.180
JU2466	S. America	0.814	0.994	0.900	1.000	673	0.007	94560	10939	0.116
JU2478	Europe	0.341	0.735	0.904	0.214	717	0.007	106652	11520	0.108
JU2513	Europe	0.784	0.911	0.825	0.691	1605	0.016	116827	27635	0.237
JU2519	Europe	0.433	0.199	0.058	0.000	2628	0.026	207698	49843	0.240
JU2522	Europe	0.312	0.234	0.354	0.424	1639	0.016	154808	30249	0.195
JU2526	Europe	0.219	0.069	0.058	0.000	3793	0.038	269650	72579	0.269
JU2534	Europe	0.657	0.944	0.867	0.075	836	0.008	89081	12105	0.136
JU2565	Europe	0.679	0.000	0.820	0.134	130	0.001	41682	1578	0.038
JU2566	Europe	0.292	0.488	0.708	0.058	359	0.004	57003	8235	0.144
JU2570	Europe	0.614	0.000	0.740	0.000	913	0.009	135159	16090	0.119
JU2572	Europe	0.303	0.825	0.792	0.058	1036	0.010	79883	22719	0.284
JU2575	Europe	0.292	0.824	0.723	0.076	489	0.005	59024	7854	0.133
JU2576	Europe	0.000	0.000	0.762	0.166	1350	0.013	142266	22027	0.155

JU2578	Europe	0.176	0.760	0.868	0.812	974	0.010	118552	17081	0.144
JU258	Atlantic	0.000	0.000	0.274	0.000	3509	0.035	206928	54206	0.262
JU2581	Europe	0.141	0.184	0.482	0.464	1561	0.016	144025	24825	0.172
JU2586	Europe	0.000	0.462	0.342	0.545	1898	0.019	169120	33087	0.196
JU2587	Europe	0.610	0.239	0.666	0.605	2162	0.022	153502	39383	0.257
JU2592	Europe	0.292	0.397	0.564	0.058	1455	0.015	98664	23338	0.237
JU2593	Europe	0.305	0.068	0.758	0.354	1859	0.019	154999	30011	0.194
JU2600	Europe	0.611	0.000	0.703	0.000	1479	0.015	139840	29012	0.207
JU2610	Europe	0.567	0.000	0.703	0.000	1716	0.017	141986	30897	0.218
JU2619	N. America	0.073	1.000	0.710	0.592	1904	0.019	139960	31258	0.223
JU2800	Europe	0.452	0.000	0.902	0.149	1323	0.013	133149	21096	0.158
JU2811	Australia	0.319	0.000	0.379	0.705	2177	0.022	182212	43729	0.240
JU2825	Europe	0.292	0.000	0.613	0.134	1037	0.010	86020	25271	0.294
JU2829	Europe	0.251	0.624	0.482	0.495	1495	0.015	153621	26792	0.174
JU2838	N. America	0.376	0.627	0.219	0.131	1709	0.017	159833	33717	0.211
JU2841	New Zealand	0.129	0.504	0.730	0.546	1639	0.016	146135	30703	0.210
JU2853	Europe	0.303	0.874	0.820	0.692	338	0.003	68256	4556	0.067
JU2862	Europe	0.373	0.639	0.868	0.145	870	0.009	112976	12541	0.111
JU2866	N. America	0.161	0.706	0.772	0.160	1556	0.016	135682	29032	0.214
JU2878	N. America	0.426	0.753	0.660	0.819	1743	0.017	150327	34140	0.227
JU2879	N. America	0.000	0.557	0.332	0.167	2313	0.023	188605	49937	0.265
JU2906	Europe	0.403	0.858	0.853	0.464	694	0.007	78203	10326	0.132
JU2907	Europe	0.151	0.939	0.853	0.669	444	0.004	40348	5445	0.135
JU310	Europe	0.495	0.885	0.774	0.202	827	0.008	110575	14902	0.135
JU311	Europe	0.292	0.000	0.866	0.149	1176	0.012	84376	14319	0.170
JU3125	Europe	0.605	0.737	0.458	0.632	1335	0.013	117986	25564	0.217
JU3127	Europe	0.603	0.635	0.458	0.436	1387	0.014	124637	25540	0.205
JU3128	Europe	0.376	0.778	0.853	0.276	702	0.007	93411	10329	0.111
JU3132	Europe	0.402	0.000	0.712	0.066	999	0.010	134611	15550	0.116
JU3134	Europe	0.151	0.309	0.868	0.902	1727	0.017	119861	27718	0.231
JU3135	Europe	0.092	0.950	0.904	0.873	1240	0.012	104695	21465	0.205
JU3137	Europe	0.482	0.000	0.768	0.701	1239	0.012	135633	22552	0.166
JU3140	Europe	0.614	0.000	0.685	0.000	1130	0.011	144483	17782	0.123
JU3141	Europe	0.292	0.000	0.756	0.058	772	0.008	96197	15055	0.157
JU3144	Africa	0.410	0.727	0.512	0.587	1822	0.018	148206	35131	0.237
JU3166	Atlantic	0.155	0.230	0.354	0.000	2466	0.025	196219	44301	0.226
JU3167	Atlantic	0.073	0.000	0.000	0.140	2796	0.028	233185	60051	0.258

JU3169	Atlantic	0.073	0.000	0.403	0.140	1874	0.019	194808	31708	0.163
JU3224	New Zealand	0.413	0.678	0.383	0.730	1999	0.020	150166	34389	0.229
JU3225	New Zealand	0.181	0.679	0.904	0.678	1008	0.010	99429	17591	0.177
JU3226	New Zealand	0.000	0.000	0.000	0.000	5767	0.058	451149	120800	0.268
JU3228	New Zealand	0.328	0.252	0.590	0.756	2237	0.022	158485	36471	0.230
JU323	Europe	0.992	0.534	0.917	0.000	1178	0.012	113780	18307	0.161
JU3280	Europe	0.679	0.099	0.556	0.762	1436	0.014	137853	24509	0.178
JU3282	Europe	0.977	1.000	0.949	0.636	1539	0.015	116377	28173	0.242
JU3291	Europe	0.611	0.000	0.703	0.000	1424	0.014	139762	28136	0.201
JU346	Europe	0.240	0.336	0.723	0.199	982	0.010	119808	16370	0.137
JU360	Europe	0.305	0.829	0.717	0.476	1585	0.016	135813	29711	0.219
JU367	Europe	0.292	0.706	0.948	0.134	355	0.004	47201	4533	0.096
JU393	Europe	0.587	0.000	0.654	0.262	2038	0.020	135471	39470	0.291
JU394	Europe	0.292	0.000	0.640	0.134	559	0.006	59583	13390	0.225
JU397	Europe	0.506	0.000	0.740	0.000	1075	0.011	111079	16870	0.152
JU406	Europe	0.292	0.000	0.679	0.134	546	0.005	63009	11367	0.180
JU440	Europe	0.343	0.546	0.812	0.651	417	0.004	68622	8787	0.128
JU561	Europe	0.786	0.450	0.899	0.646	1171	0.012	92742	22392	0.241
JU642	Europe	0.073	0.508	0.853	0.519	929	0.009	117189	14321	0.122
JU751	Europe	0.211	0.284	0.697	0.366	2179	0.022	149286	35978	0.241
JU774	Europe	0.629	0.816	0.512	0.614	1911	0.019	143568	38573	0.269
JU775	Europe	0.302	0.000	0.150	0.000	2625	0.026	243756	54370	0.223
JU778	Europe	0.567	0.000	0.763	0.399	1916	0.019	143528	33372	0.233
JU782	Europe	0.477	0.000	0.484	0.259	2820	0.028	209429	61273	0.293
JU792	Europe	0.506	0.000	0.740	0.000	880	0.009	138559	15865	0.114
JU830	Europe	0.077	0.544	0.792	0.366	2047	0.020	124853	28459	0.228
JU847	Europe	0.821	0.126	0.774	0.111	1524	0.015	119085	24100	0.202
KR314	N. America	0.457	0.696	0.894	0.862	1983	0.020	131018	25048	0.191
LKC34	Africa	0.868	0.193	0.745	0.421	1248	0.012	123406	19662	0.159
MY1	Europe	0.216	0.787	0.785	0.346	1387	0.014	138209	29190	0.211
MY10	Europe	0.652	0.368	0.607	0.799	2475	0.025	174925	55624	0.318
MY16	Europe	0.260	0.000	0.245	0.000	2315	0.023	183670	49123	0.267
MY18	Europe	0.000	0.404	0.769	0.000	1640	0.016	154521	30222	0.196
MY2147	Europe	0.151	0.000	0.754	0.133	860	0.009	108390	15509	0.143
MY2212	Europe	0.391	0.466	0.852	0.455	1169	0.012	113204	16609	0.147

MY23	Europe	0.000	0.000	0.000	0.000	3822	0.038	235686	70646	0.300
MY2453	Europe	0.394	0.000	0.866	0.149	1280	0.013	120121	23257	0.194
MY2530	Europe	0.638	0.769	0.717	0.817	677	0.007	107038	13179	0.123
MY2535	Europe	0.316	0.935	0.853	0.678	866	0.009	91689	11946	0.130
MY2573	Europe	0.333	0.085	0.739	0.061	488	0.005	88791	5947	0.067
MY2585	Europe	0.304	0.929	0.792	0.821	1612	0.016	118229	27078	0.229
MY2693	Europe	0.141	0.727	0.897	0.755	1569	0.016	113210	27071	0.239
MY2713	Europe	0.000	0.985	0.898	0.755	1779	0.018	119161	30390	0.255
MY2741	Europe	0.141	0.523	0.768	0.370	2204	0.022	154168	40246	0.261
MY518	Europe	0.318	0.562	0.953	0.170	1567	0.016	119578	21311	0.178
MY679	Europe	0.395	0.914	0.805	0.839	1296	0.013	111818	19692	0.176
MY772	Europe	0.257	0.219	0.779	0.000	1250	0.012	124005	17821	0.144
MY795	Europe	0.260	0.523	0.768	0.000	1570	0.016	129122	27025	0.209
MY920	Europe	0.638	0.756	0.717	0.707	943	0.009	112924	17326	0.153
N2	Europe	0.376	1.000	0.890	0.257	NA	NA	NA	NA	NA
NIC1	Europe	0.292	0.910	0.711	0.641	1318	0.013	99391	20769	0.209
NIC1049	Europe	0.286	0.487	0.739	0.061	358	0.004	85411	5406	0.063
NIC1107	Europe	0.292	0.000	0.713	0.134	381	0.004	63682	8695	0.137
NIC1119	S. America	0.816	0.783	0.589	0.662	1869	0.019	152106	37905	0.249
NIC166	Europe	0.073	0.622	0.723	0.269	1115	0.011	105698	15695	0.148
NIC195	Atlantic	0.000	0.164	0.062	0.421	3307	0.033	199802	62556	0.313
NIC199	Atlantic	0.307	0.000	0.141	0.000	2923	0.029	210803	56680	0.269
NIC2	Europe	0.292	1.000	0.820	0.978	163	0.002	31341	2270	0.072
NIC207	Europe	0.292	0.599	0.865	0.988	532	0.005	73533	7154	0.097
NIC231	Europe	0.792	0.252	0.865	0.823	1140	0.011	101135	13884	0.137
NIC236	Europe	0.236	0.287	0.673	0.399	1689	0.017	121592	23549	0.194
NIC242	Europe	0.312	0.602	0.756	0.314	1191	0.012	87395	18871	0.216
NIC251	Atlantic	0.000	0.000	0.000	0.000	3802	0.038	278599	77406	0.278
NIC252	Atlantic	0.000	0.382	0.274	0.220	2431	0.024	192408	48136	0.250
NIC255	Europe	0.292	0.652	0.862	0.979	1067	0.011	77276	13333	0.173
NIC256	Europe	0.412	0.000	0.559	0.259	3151	0.031	182367	50546	0.277
NIC258	Europe	0.398	0.234	0.058	0.000	3884	0.039	236759	69948	0.295
NIC259	Europe	0.280	0.000	0.739	0.424	1120	0.011	129530	17763	0.137
NIC260	Europe	0.302	0.636	0.650	0.078	2600	0.026	192297	49858	0.259
NIC261	Europe	0.477	0.000	0.484	0.000	2914	0.029	212854	49906	0.234
NIC262	Europe	0.434	0.000	0.484	0.074	3075	0.031	207470	54754	0.264
NIC265	Europe	0.256	0.000	0.085	0.000	2901	0.029	250079	54501	0.218

NIC266	Europe	0.194	0.164	0.218	0.165	2197	0.022	166172	41867	0.252
NIC267	Europe	0.073	0.714	0.868	0.275	1107	0.011	115423	15514	0.134
NIC268	Europe	0.000	0.467	0.226	0.279	2243	0.022	181716	36982	0.204
NIC269	Europe	0.397	0.000	0.339	0.069	2088	0.021	165440	31258	0.189
NIC271	Europe	0.477	0.000	0.484	0.259	3178	0.032	193468	54014	0.279
NIC272	Europe	0.264	0.000	0.758	0.000	1766	0.018	155743	29770	0.191
NIC274	Europe	0.685	0.313	0.658	0.096	1339	0.013	139239	26480	0.190
NIC275	Europe	0.840	0.522	0.847	0.616	2548	0.025	142895	40005	0.280
NIC276	Europe	0.308	1.000	0.868	0.000	1249	0.012	109724	18135	0.165
NIC277	Europe	0.410	0.624	0.953	0.134	791	0.008	104923	12374	0.118
NIC3	Europe	0.605	0.602	0.817	0.124	1194	0.012	138590	18969	0.137
NIC501	Europe	0.614	0.000	0.204	0.000	1938	0.019	167069	39544	0.237
NIC511	Europe	0.151	0.826	0.829	0.257	839	0.008	113548	13223	0.116
NIC513	Europe	0.184	0.370	0.695	0.355	1623	0.016	151535	33284	0.220
NIC514	Europe	0.329	0.292	0.794	0.424	1733	0.017	141823	27931	0.197
NIC515	Europe	0.081	0.685	0.395	0.706	2188	0.022	158133	37847	0.239
NIC522	Europe	0.621	0.093	0.805	0.465	934	0.009	104875	19369	0.185
NIC523	Europe	0.151	0.091	0.868	0.543	1398	0.014	151910	23626	0.156
NIC526	Europe	0.222	0.000	0.817	0.426	1177	0.012	140427	23111	0.165
NIC527	Europe	0.378	0.139	0.768	0.000	1129	0.011	127670	21845	0.171
NIC528	Europe	0.376	0.859	0.707	0.760	1725	0.017	137874	34604	0.251
NIC529	Europe	0.426	0.203	0.868	0.451	924	0.009	103634	14178	0.137
PB303	Unknown	0.717	1.000	0.865	0.829	1447	0.014	98449	25381	0.258
PS2025	N. America	0.081	0.517	0.000	0.069	2425	0.024	197969	48596	0.245
PX179	N. America	0.171	0.791	0.904	0.991	513	0.005	65022	9408	0.145
QG2075	N. America	0.237	0.758	0.130	0.566	2166	0.022	176964	44474	0.251
QG2811	Australia	0.581	0.646	0.829	0.253	1259	0.013	101304	24664	0.243
QG2813	Australia	0.519	0.732	0.768	0.511	1215	0.012	118225	21860	0.185
QG2818	Australia	1.000	1.000	0.953	1.000	550	0.005	92910	9877	0.106
QG2823	Australia	0.286	0.742	0.817	0.903	1354	0.014	117772	19541	0.166
QG2824	Australia	0.390	0.666	0.953	0.851	766	0.008	112581	13457	0.120
QG2825	Australia	0.384	0.671	0.817	0.828	1354	0.014	109802	18777	0.171
QG2827	Australia	0.560	0.376	0.367	0.565	2109	0.021	176894	43889	0.248
QG2828	Australia	0.560	0.376	0.391	0.565	2114	0.021	175041	43826	0.250
QG2832	Australia	0.673	0.418	0.226	0.391	1497	0.015	146501	30344	0.207
QG2835	Australia	0.677	0.418	0.374	0.783	1915	0.019	151287	32585	0.215
QG2836	Australia	0.723	0.764	0.422	0.429	1597	0.016	134594	23837	0.177

QG2837	Australia	0.673	1.000	0.226	0.400	1792	0.018	143515	35248	0.246
QG2838	Australia	0.985	0.756	0.316	0.645	1932	0.019	159248	39142	0.246
QG2841	Australia	0.916	0.947	0.672	0.000	1302	0.013	136119	23138	0.170
QG2843	Australia	0.976	1.000	0.901	0.999	560	0.006	92856	9613	0.104
QG2846	Australia	0.248	0.320	0.000	0.209	2180	0.022	179522	41735	0.232
QG2850	Australia	0.652	0.794	0.573	0.959	1162	0.012	123595	23978	0.194
QG2854	Australia	0.593	0.701	0.298	0.849	1870	0.019	161265	37637	0.233
QG2855	Australia	0.593	0.657	0.251	0.849	1827	0.018	166740	37714	0.226
QG2857	Australia	0.580	0.675	0.465	0.849	1731	0.017	154760	34344	0.222
QG2873	Australia	0.698	0.822	0.216	0.936	1779	0.018	155811	37394	0.240
QG2874	Australia	0.698	0.791	0.216	0.936	1848	0.018	157752	38555	0.244
QG2875	Australia	0.647	0.780	0.569	0.186	1739	0.017	147350	31179	0.212
QG2877	Australia	0.615	0.619	0.369	0.786	2033	0.020	157354	38180	0.243
QG2932	Australia	0.529	0.858	0.724	0.998	1086	0.011	125449	20320	0.162
QG536	N. America	0.846	1.000	0.745	0.301	1712	0.017	122846	36058	0.294
QG556	N. America	0.000	0.512	0.088	0.000	2783	0.028	168531	41279	0.245
QG557	N. America	0.222	0.404	0.892	0.076	1876	0.019	123964	19839	0.160
QW947	S. America	0.799	0.260	0.606	0.481	1740	0.017	156656	33634	0.215
QX1211	N. America	0.000	0.000	0.000	0.000	5240	0.052	488149	123859	0.254
QX1212	N. America	0.222	0.743	0.288	0.312	2032	0.020	163520	39953	0.244
QX1233	N. America	0.141	0.381	0.601	0.222	1543	0.015	140996	21967	0.156
QX1791	Hawaii	0.000	0.000	0.000	0.000	3694	0.037	263167	92669	0.352
QX1792	Hawaii	0.000	0.000	0.479	0.289	2129	0.021	202531	39836	0.197
QX1793	Hawaii	0.000	0.000	0.053	0.000	2178	0.022	214878	42961	0.200
QX1794	Hawaii	0.000	0.000	0.000	0.000	2988	0.030	227050	57989	0.255
RC301	Europe	0.231	1.000	0.865	0.829	1480	0.015	105523	25921	0.246
WN2001	Europe	0.000	0.502	0.368	0.296	2487	0.025	188044	46097	0.245
WN2002	Europe	0.289	0.743	0.698	0.427	1565	0.016	114573	32070	0.280
WN2033	Europe	0.374	0.507	0.904	0.365	1696	0.017	132699	23982	0.181
WN2050	Europe	0.292	0.000	0.000	0.134	1617	0.016	133276	35214	0.264
WN2063	Europe	0.000	0.330	0.825	0.341	1079	0.011	120087	17700	0.147
WN2064	Europe	0.339	0.857	0.903	0.061	439	0.004	68962	5196	0.075
WN2066	Europe	0.320	0.618	0.640	0.076	752	0.007	81894	17704	0.216
XZ1513	Hawaii	0.000	0.000	0.000	0.000	2623	0.026	235948	54106	0.229
XZ1514	Hawaii	0.000	0.000	0.000	0.000	6603	0.066	497062	151663	0.305
XZ1515	Hawaii	0.000	0.000	0.224	0.000	2253	0.022	234705	42956	0.183
XZ1516	Hawaii	0.000	0.000	0.000	0.000	11673	0.116	676100	322172	0.477

XZ1672	N. America	0.171	0.520	0.904	0.558	846	0.008	100578	12368	0.123
XZ1734	S. America	0.605	0.292	0.521	0.508	2120	0.021	154270	34769	0.225
XZ1735	S. America	0.362	0.425	0.432	0.457	1592	0.016	140656	29981	0.213
XZ1756	N. America	0.383	0.443	0.749	0.213	1792	0.018	125407	29700	0.237
XZ2018	Unknown	0.096	0.826	0.904	0.999	834	0.008	74749	11020	0.147
XZ2019	N. America	0.000	0.000	0.000	0.000	2717	0.027	235033	47753	0.203
XZ2020	N. America	0.096	0.752	0.248	0.388	1051	0.010	120434	22352	0.186

Supplementary Table 4 | Genome assembly and annotations metrics

Genome assembly and annotations metrics shown for the N2 reference genome, the CB4856 long-read genome, and 14 wild isotype genomes generated here. BUSCO (version 4.0.6) completeness scores, using the nematoda_ob10 dataset, are shown for the genome (using the option *-m genome*) and gene set (using the option *-m proteins*) separately. Gene set completeness scores were calculated using only the longest isoform of each protein coding gene. Note: the CB4856 genome was scaffolded based on alignments to the N2 reference genome. To avoid accidentally introducing errors, particularly in hyper-divergent regions where nucleotide identity is low and alignment is difficult, we opted not to use the same approach.

Isotype	Span (Mb)	Number of contigs	Number of contigs >50kb	Contig N50 length (Mb)	Contig N50 number	Longest contig (Mb)	Span of Ns (kb)	BUSCO genome complete (%) / fragmented (%)	Number of predicted genes	BUSCO gene set complete (%) / fragmented (%)
N2 (reference)	100.29	7	6	17.49	3	20.92	0.00	99.4 / 0.1	20,190	99.4 / 0.3
CB4856 (Kim <i>et al.</i> 2019)	102.91	7	6	17.99	3	21.39	69.00	99.3 / 0.1	22,229	96.4 / 2.2
DL238	103.40	118	65	2.69	13	6.28	0.00	99.4 / 0.2	23,177	96.2 / 2.4
ECA36	105.62	82	63	2.84	12	8.75	0.00	99.5 / 0.2	23,610	96.3 / 2.4
ECA396	103.36	128	72	2.64	15	4.60	0.00	99.5 / 0.2	23,227	96.2 / 2.3
EG4725	103.85	80	48	3.61	11	6.26	0.00	99.6 / 0.1	23,178	96.4 / 2.2
JU1400	103.28	67	53	2.88	13	5.71	0.00	99.3 / 0.2	23,229	96.0 / 2.2
JU2526	102.93	98	78	2.07	16	5.05	0.00	99.5 / 0.1	23,140	95.9 / 2.6
JU2600	104.21	87	56	3.24	13	5.77	0.00	99.6 / 0.1	23,216	96.3 / 2.4
JU310	114.26	283	139	2.68	15	6.22	0.00	99.6 / 0.1	25,821	96.2 / 2.3
MY2147	103.78	74	57	3.67	12	5.80	0.00	99.6 / 0.1	23,164	96.4 / 2.3
MY2693	102.92	113	59	2.86	13	6.21	0.00	99.6 / 0.1	23,203	96.1 / 2.5
NIC2	103.06	89	67	2.80	13	6.79	0.00	99.7 / 0.1	23,171	96.2 / 2.5
NIC526	104.20	85	58	2.81	13	6.78	0.00	99.6 / 0.1	23,387	96.1 / 2.6
QX1794	108.69	185	107	2.49	14	6.50	0.00	99.5 / 0.1	24,207	96.1 / 2.2
XZ1516	105.79	149	89	2.05	19	5.11	0.00	99.5 / 0.2	23,791	96.1 / 2.5

Supplementary Table 5 | Distribution of the species-wide hyper-divergent regions in *C. elegans*

The genomic coordinates of all hyper-divergent regions described in the manuscript. We calculated the frequency each 1 kb genomic bin was classified as hyper-divergent across the *C. elegans* species. For each hyper-divergent region, we report the average 1 kb bin frequency.

Chromosome	Start	End	Size (bp)	Frequency
I	863000	875000	12000	0.08663618
I	1018000	1063000	45000	0.12445799
I	1101000	1127000	26000	0.07422608
I	1169000	1179000	10000	0.01646341
I	1181000	1224000	43000	0.12712706
I	1337000	1425000	88000	0.13639828
I	1513000	1529000	16000	0.16215701
I	1563000	1587000	24000	0.01575203
I	1600000	1628000	28000	0.09037456
I	1749000	1772000	23000	0.10418876
I	1864000	1873000	9000	0.10060976
I	1895000	1938000	43000	0.17129892
I	1949000	1967000	18000	0.37466125
I	2044000	2055000	11000	0.04296009
I	2157000	2170000	13000	0.14798311
I	2328000	2363000	35000	0.41010453
I	2467000	2486000	19000	0.10943517
I	2799000	2809000	10000	0.01829268
I	3019000	3034000	15000	0.0550813
I	3060000	3073000	13000	0.06214822
I	3183000	3195000	12000	0.10670732
I	3229000	3241000	12000	0.20147358
I	3586000	3598000	12000	0.00304878
I	3799000	3809000	10000	0.00304878
I	4453000	4463000	10000	0.00426829
I	10306000	10315000	9000	0.00914634
I	10906000	10945000	39000	0.01657286
I	10953000	11010000	57000	0.03712024
I	11432000	11456000	24000	0.07050305
I	11468000	11482000	14000	0.02482578
I	11833000	11842000	9000	0.01490515
I	11915000	11925000	10000	0.14756098
I	12042000	12057000	15000	0.03780488

I	12061000	12158000	97000	0.06389867
I	12206000	12216000	10000	0.00304878
I	12220000	12475000	255000	0.01846007
I	12606000	12682000	76000	0.05267169
I	12688000	12698000	10000	0.02042683
I	12751000	12763000	12000	0.21620935
I	12785000	12809000	24000	0.01816565
I	12986000	12995000	9000	0.00304878
I	13012000	13226000	214000	0.04628733
I	13341000	13368000	27000	0.03331075
I	13375000	13386000	11000	0.04711752
I	13799000	13820000	21000	0.0203252
I	14027000	14037000	10000	0.01402439
I	14281000	14319000	38000	0.01131258
I	14410000	14425000	15000	0.09898374
I	14491000	14500000	9000	0.0196477
I	14503000	14518000	15000	0.10386179
I	14535000	14554000	19000	0.01957638
II	262000	332000	70000	0.0527439
II	403000	424000	21000	0.00391986
II	429000	457000	28000	0.03059669
II	464000	629000	165000	0.0313932
II	631000	682000	51000	0.03186275
II	868000	994000	126000	0.06571816
II	1001000	1076000	75000	0.06617886
II	1108000	1117000	9000	0.01219512
II	1256000	1310000	54000	0.16327913
II	1353000	1362000	9000	0.06402439
II	1369000	1439000	70000	0.01019164
II	1515000	1700000	185000	0.22343441
II	1703000	2194000	491000	0.32531295
II	2219000	2509000	290000	0.40447855
II	2528000	2654000	126000	0.07108982
II	2715000	2724000	9000	0.00304878
II	2785000	2798000	13000	0.01242964
II	2799000	2810000	11000	0.0058204
II	2835000	2845000	10000	0.33414634

II	2870000	2925000	55000	0.16385809
II	2965000	2974000	9000	0.00813008
II	3060000	3087000	27000	0.26343722
II	3177000	3271000	94000	0.52075765
II	3280000	3399000	119000	0.3860166
II	3499000	3512000	13000	0.04620075
II	3660000	3780000	120000	0.34751016
II	3800000	3887000	87000	0.09006168
II	3902000	3926000	24000	0.00304878
II	3942000	3954000	12000	0.00304878
II	3987000	4013000	26000	0.03470919
II	4174000	4186000	12000	0.00304878
II	4197000	4208000	11000	0.01801552
II	4303000	4312000	9000	0.0152439
II	4432000	4444000	12000	0.02769309
II	4720000	4731000	11000	0.05792683
II	5295000	5315000	20000	0.00304878
II	5839000	5869000	30000	0.00304878
II	10429000	10465000	36000	0.03353659
II	10626000	10674000	48000	0.01587907
II	11367000	11400000	33000	0.00554324
II	11980000	11994000	14000	0.11672474
II	12012000	12022000	10000	0.08323171
II	12028000	12038000	10000	0.10518293
II	12061000	12070000	9000	0.0304878
II	12083000	12108000	25000	0.04158537
II	12289000	12302000	13000	0.00938086
II	12397000	12407000	10000	0.00823171
II	12454000	12622000	168000	0.06854312
II	12623000	12653000	30000	0.00558943
II	12659000	12717000	58000	0.04331371
II	12718000	12732000	14000	0.01263066
II	12738000	12748000	10000	0.01310976
II	12773000	12786000	13000	0.00304878
II	12798000	12819000	21000	0.02642276
II	12867000	12881000	14000	0.07796167
II	12892000	12901000	9000	0.00304878

II	12928000	12938000	10000	0.00304878
II	13120000	13154000	34000	0.00887733
II	13199000	13223000	24000	0.02566057
II	13244000	13265000	21000	0.12166086
II	13320000	13341000	21000	0.11541812
II	13354000	13415000	61000	0.20186925
II	13430000	13467000	37000	0.08833223
II	13472000	13496000	24000	0.00635163
II	13520000	13579000	59000	0.16577098
II	13580000	13590000	10000	0.00457317
II	13612000	13630000	18000	0.03895664
II	13642000	13679000	37000	0.06056361
II	13736000	13763000	27000	0.05770099
II	13771000	13780000	9000	0.00304878
II	13843000	13852000	9000	0.0304878
II	13862000	13886000	24000	0.14278455
II	13889000	13898000	9000	0.02134146
II	13936000	13957000	21000	0.02366434
II	13967000	13978000	11000	0.01108647
II	14076000	14090000	14000	0.07012195
II	14224000	14236000	12000	0.04674797
II	14303000	14338000	35000	0.08057491
II	14979000	14988000	9000	0.04234417
III	0	345000	345000	0.12352421
III	697000	708000	11000	0.66407982
III	920000	934000	14000	0.01067073
III	936000	1098000	162000	0.33278756
III	1117000	1140000	23000	0.03446448
III	1172000	1437000	265000	0.28515877
III	1465000	1549000	84000	0.06435105
III	1559000	1574000	15000	0.01869919
III	1578000	1619000	41000	0.06685009
III	1625000	1639000	14000	0.00979965
III	1666000	1679000	13000	0.01313321
III	1682000	1706000	24000	0.03125
III	1722000	1732000	10000	0.01737805
III	1746000	1799000	53000	0.04780258

III	1827000	1842000	15000	0.10081301
III	1843000	1859000	16000	0.01333841
III	1861000	1870000	9000	0.03387534
III	1899000	1917000	18000	0.10162602
III	1984000	2.00E+06	16000	0.07602896
III	2037000	2101000	64000	0.02372332
III	2199000	2358000	159000	0.11058061
III	2369000	2445000	76000	0.11501123
III	2512000	2539000	27000	0.07983288
III	2567000	2576000	9000	0.09146341
III	2589000	2613000	24000	0.15612297
III	2687000	2696000	9000	0.09044715
III	2763000	2778000	15000	0.02947154
III	2788000	2803000	15000	0.04654472
III	2815000	2838000	23000	0.0292948
III	2901000	2917000	16000	0.00304878
III	2959000	3012000	53000	0.00719052
III	3069000	3089000	20000	0.10487805
III	3289000	3334000	45000	0.20406504
III	7669000	7678000	9000	0.07621951
III	9912000	9968000	56000	0.09097343
III	11037000	11050000	13000	0.065197
III	11093000	11143000	50000	0.06530488
III	11152000	11169000	17000	0.09379484
III	11273000	11283000	10000	0.21128049
III	11567000	11593000	26000	0.03764071
III	11922000	11931000	9000	0.00914634
III	12035000	12050000	15000	0.00304878
III	12062000	12074000	12000	0.13135163
III	12232000	12245000	13000	0.02110694
III	12251000	12260000	9000	0.00914634
III	12296000	12385000	89000	0.22163606
III	12409000	12423000	14000	0.05052265
III	12425000	12451000	26000	0.00422139
III	12526000	12535000	9000	0.04742547
III	12598000	12608000	10000	0.02439024
III	12673000	12683000	10000	0.14420732

III	12729000	12760000	31000	0.00629426
III	12824000	12836000	12000	0.00304878
III	12992000	13002000	10000	0.00579268
III	13231000	13243000	12000	0.00304878
IV	16000	32000	16000	0.05945122
IV	1005000	1022000	17000	0.06258967
IV	1074000	1098000	24000	0.15866362
IV	1113000	1125000	12000	0.03455285
IV	1228000	1352000	124000	0.08448072
IV	1536000	1551000	15000	0.0050813
IV	1590000	1609000	19000	0.05327343
IV	1816000	1888000	72000	0.00821477
IV	1983000	2034000	51000	0.13259206
IV	2054000	2067000	13000	0.005394
IV	2105000	2116000	11000	0.00498891
IV	2184000	2210000	26000	0.09111163
IV	2264000	2275000	11000	0.18902439
IV	2335000	2366000	31000	0.10188828
IV	2464000	2481000	17000	0.01058106
IV	2487000	2507000	20000	0.01128049
IV	2519000	2533000	14000	0.05422474
IV	2552000	2603000	51000	0.43896461
IV	2685000	2746000	61000	0.32521991
IV	2759000	2770000	11000	0.02549889
IV	2781000	2800000	19000	0.01941592
IV	2809000	2829000	20000	0.03612805
IV	2831000	2843000	12000	0.00304878
IV	2859000	2891000	32000	0.2105564
IV	2949000	2960000	11000	0.01274945
IV	3369000	3383000	14000	0.07142857
IV	3455000	3480000	25000	0.00304878
IV	3506000	3517000	11000	0.01773836
IV	3684000	3694000	10000	0.15640244
IV	3732000	3744000	12000	0.00813008
IV	3810000	3822000	12000	0.00304878
IV	3823000	3833000	10000	0.05487805
IV	3887000	3973000	86000	0.07111458

IV	4052000	4068000	16000	0.02477134
IV	4098000	4171000	73000	0.39308386
IV	4347000	4358000	11000	0.11419069
IV	4370000	4380000	10000	0.04481707
IV	4407000	4416000	9000	0.05792683
IV	5447000	5465000	18000	0.02828591
IV	5821000	5843000	22000	0.02757761
IV	6206000	6302000	96000	0.0593877
IV	6606000	6626000	20000	0.05304878
IV	6629000	6661000	32000	0.03544207
IV	7451000	7471000	20000	0.11402439
IV	12376000	12446000	70000	0.00688153
IV	12827000	12902000	75000	0.03495935
IV	12947000	12956000	9000	0.00304878
IV	12987000	12996000	9000	0.02743902
IV	13416000	13428000	12000	0.12754065
IV	13517000	13543000	26000	0.00879456
IV	13623000	13641000	18000	0.00304878
IV	13980000	14004000	24000	0.0152439
IV	14170000	14185000	15000	0.02764228
IV	14186000	14195000	9000	0.00914634
IV	14519000	14551000	32000	0.03134527
IV	15310000	15321000	11000	0.00304878
IV	15439000	15479000	40000	0.0601372
IV	15487000	15496000	9000	0.00304878
IV	15612000	15634000	22000	0.03616962
IV	15759000	15769000	10000	0.07103659
IV	15897000	15908000	11000	0.01995565
IV	15944000	15954000	10000	0.00304878
IV	16221000	16255000	34000	0.02501793
IV	16285000	16362000	77000	0.10433164
IV	16425000	16447000	22000	0.04226718
IV	16462000	16492000	30000	0.01351626
IV	16709000	16770000	61000	0.1170032
IV	16788000	16806000	18000	0.04674797
IV	16838000	16924000	86000	0.06891662
IV	17075000	17085000	10000	0.0222561

IV	17134000	17150000	16000	0.03429878
IV	17207000	17230000	23000	0.00596501
IV	17254000	17396000	142000	0.17264256
IV	17404000	17422000	18000	0.10687669
IV	17446000	17458000	12000	0.18267276
V	10000	1141000	1131000	0.07596612
V	1486000	1541000	55000	0.05515521
V	1621000	1664000	43000	0.12344016
V	1672000	1722000	50000	0.05469512
V	1844000	1853000	9000	0.00304878
V	1954000	1965000	11000	0.0058204
V	2005000	2031000	26000	0.00574578
V	2037000	2066000	29000	0.25851556
V	2127000	2185000	58000	0.00846299
V	2227000	2376000	149000	0.07055165
V	2549000	3195000	646000	0.05841765
V	3237000	3693000	456000	0.1346879
V	3712000	3731000	19000	0.00304878
V	3758000	4333000	575000	0.05503181
V	4339000	4355000	16000	0.0390625
V	4358000	4388000	30000	0.02296748
V	4404000	4418000	14000	0.00500871
V	4434000	4465000	31000	0.00304878
V	4531000	4540000	9000	0.00609756
V	4599000	4615000	16000	0.00304878
V	4743000	4769000	26000	0.01512664
V	4855000	4873000	18000	0.02879404
V	4920000	4957000	37000	0.00988794
V	4976000	5077000	101000	0.02460155
V	5078000	5091000	13000	0.00750469
V	5177000	5270000	93000	0.0035733
V	6362000	6373000	11000	0.01829268
V	6380000	6394000	14000	0.00304878
V	6416000	6427000	11000	0.00609756
V	6877000	6890000	13000	0.00304878
V	7102000	7170000	68000	0.01129842
V	7209000	7669000	460000	0.06605912

V	8741000	8775000	34000	0.01398852
V	8960000	8990000	30000	0.07042683
V	10454000	10464000	10000	0.00304878
V	12362000	12455000	93000	0.04756753
V	13044000	13124000	80000	0.00499238
V	13165000	13175000	10000	0.00304878
V	13500000	13511000	11000	0.01967849
V	13542000	13552000	10000	0.04512195
V	13588000	13601000	13000	0.06707317
V	13676000	13767000	91000	0.00512597
V	13806000	13962000	156000	0.00603893
V	14305000	14320000	15000	0.00304878
V	14501000	14662000	161000	0.04192547
V	15160000	15200000	40000	0.00914634
V	15210000	16161000	951000	0.08622503
V	16175000	16452000	277000	0.11743858
V	16458000	16512000	54000	0.3023374
V	16533000	16675000	142000	0.08457145
V	16693000	16781000	88000	0.06492517
V	16833000	17120000	287000	0.14553412
V	17132000	17742000	610000	0.19784086
V	17743000	17888000	145000	0.12626156
V	17901000	17910000	9000	0.00304878
V	17920000	18001000	81000	0.01637308
V	18048000	18074000	26000	0.3570591
V	18127000	18262000	135000	0.31935411
V	18270000	18333000	63000	0.02855207
V	18335000	18383000	48000	0.02337398
V	18391000	18421000	30000	0.00955285
V	18430000	19779000	1349000	0.13560858
V	19808000	19824000	16000	0.02839177
V	19834000	19874000	40000	0.09032012
V	19886000	19952000	66000	0.09774575
V	19960000	19999000	39000	0.05534709
V	20060000	20087000	27000	0.32588076
V	20099000	20665000	566000	0.1189186
X	1000	109000	108000	0.12347561

X	115000	292000	177000	0.10438198
X	1460000	1516000	56000	0.0341899
X	1534000	1547000	13000	0.03822702
X	1558000	1596000	38000	0.00401155
X	1645000	1695000	50000	0.01384146
X	1711000	1733000	22000	0.03464523
X	1755000	1776000	21000	0.15926249
X	1800000	1840000	40000	0.0242378
X	2030000	2039000	9000	0.00304878
X	2744000	2753000	9000	0.00304878
X	4342000	4356000	14000	0.02743902
X	5046000	5056000	10000	0.07743902
X	5114000	5123000	9000	0.00609756
X	5309000	5318000	9000	0.00304878
X	6112000	6128000	16000	0.00381098
X	6905000	6917000	12000	0.06097561
X	7345000	7365000	20000	0.35015244
X	7896000	7908000	12000	0.0152439
X	7914000	7930000	16000	0.05182927
X	8101000	8110000	9000	0.03353659
X	11768000	11784000	16000	0.00304878
X	11798000	11807000	9000	0.01930894
X	12201000	12224000	23000	0.02889714
X	12602000	12611000	9000	0.01422764
X	12992000	13001000	9000	0.03353659
X	13451000	13466000	15000	0.02134146
X	14174000	14183000	9000	0.00304878
X	14215000	14227000	12000	0.55919715
X	14355000	14370000	15000	0.03882114
X	14371000	14396000	25000	0.09792683
X	14635000	14644000	9000	0.03658537
X	15533000	15543000	10000	0.0054878
X	15617000	15637000	20000	0.01082317
X	15812000	15836000	24000	0.01892785
X	17260000	17269000	9000	0.00609756
X	17287000	17302000	15000	0.00914634
X	17703000	17718000	15000	0.03597561

Supplementary Table 6 | Summary of statistics of hyper-divergent regions

Mean variant density (per kb), mean coverage (%), and size (Mb) of genomic regions relative to the N2 reference genome (entire chromosome, arm, center, and tip), hyper-divergent regions (HD), and non-divergent regions (ND) are summarized.

Chr	Statistics	All	All_HD	All_ND	Arm	Arm_HD	Arm_ND	Center	Center_HD	Center_ND	Tip	Tip_HD	Tip_ND
I	Mean variant density (per kb)	1.08	15.97	1.03	1.81	16.93	1.7	0.33	3.59	0.33	1.41	NA	1.41
	Mean coverage (%)	99.93	43.84	100.12	80.52	44.56	80.91	109.22	34.44	109.22	199.8	NA	199.8
	Size (Mb)	15.07	1.61	15.07	7.17	1.49	7.17	7.18	0.12	7.18	0.72	NA	0.72
II	Mean variant density (per kb)	2.32	18.49	1.82	3.71	18.11	2.65	1.07	24.51	1.06	1.3	20.92	1.25
	Mean coverage (%)	97.82	52.22	99.69	83.71	49.36	87.68	112.73	98.36	112.73	92.34	67.71	92.36
	Size (Mb)	15.28	3.58	15.28	7.16	3.34	7.16	7.14	0.19	7.14	0.98	0.05	0.98
III	Mean variant density (per kb)	1.76	14.97	1.53	2.84	12.99	2.47	0.8	28.48	0.78	1.57	22.2	0.8
	Mean coverage (%)	94.48	41.61	95.16	76.47	39.3	77.75	111.34	74.35	111.36	92.94	46.88	94.29
	Size (Mb)	13.78	2.16	13.78	6.11	1.74	6.11	6.62	0.06	6.62	1.06	0.36	1.06
IV	Mean variant density (per kb)	1.27	17.97	1.13	2.07	13.58	1.97	0.55	26.05	0.49	1.91	20.09	1.21
	Mean coverage (%)	97.63	54.83	97.88	84.04	44.06	84.41	108.19	73.54	108.29	96.43	61.6	97.08
	Size (Mb)	17.49	2.18	17.49	6.92	1.22	6.92	9.07	0.56	9.07	1.5	0.4	1.5
V	Mean variant density (per kb)	1.97	26.47	1.12	2.8	22.41	1.75	1.15	33.83	0.6	3.05	33.56	1.04
	Mean coverage (%)	99.68	57.42	101.82	85.24	47.17	89.22	112	79.5	112.59	99.07	65.8	101.19
	Size (Mb)	20.92	10.04	20.92	9.04	6.45	9.04	10.65	2.63	10.65	1.23	0.96	1.23
X	Mean variant density (per kb)	1.23	8.95	1.21	1.26	12.17	1.24	1.28	15.81	1.27	0.87	1.78	0.87
	Mean coverage (%)	108.95	43.55	109.01	105.61	55.17	105.68	114.83	79.16	114.83	105.99	13.8	106.18
	Size (Mb)	17.72	0.92	17.72	9.5	0.47	9.5	6.34	0.12	6.34	1.87	0.32	1.87