Supplementary Information Appendix

The earliest maize from San Marcos Tehuacán is a partial domesticate with genomic evidence of inbreeding.

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Materials and Methods

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Materials and Methods.

Archaeological Excavation, Sampling, and Dating.

San Marcos cave is located in the limestone cliffs of the southeastern part of the so-called Tecorral Canyon, an arroyo depression that follows a northwest-southeast direction, ending about two kilometers West of the center of San Marcos Necoxtla. We surveyed 1-meter squares (quadrants) that were kept unexplored during the MacNeish expedition (*1*); these quadrants were either located East of the 7 to 9 meters long rectangle that was explored in 1962 (quadrants N1E2 and N1E3), in a small portion located close to the southwestern wall (W3), or below the large unremoved rock located at the center of the cave, within the surface that remained covered by its roof. Most of the area surveyed prove to be unaltered as the stratigraphy was well contextualized and respected the countour maps down to the rock floor, reaching surfaces of Zone D and E, as previously reported (*1*). All excavations were conducted under authorization and guidance of Consejo de Arqueologia, Instituto Nacional de Antropologia e Historia (INAH, México). Geographic and quadrant information followed coordinates reported in (*1*). Sampling was performed following all necessary procedures to avoid human-related or cross-sample contamination by wearing shoe covers for personnel working within the excavation quadrants, hazmat coverall suits, nitrile gloves, and surgical masks. Specimens were collected using previously bleached forceps, wrapped in aluminum foil, and placed in individual sealed bags that were kept at the ancient DNA facilities of Langebio CINVESTAV. For dating, 10 to 20 mg of each specimen was dated by Accelerator Mass Spectrometry (AMS) using the service provided by Beta Analytic (Miami, Florida); the Beta Analytic reference number is provided in Table S1 .

We recovered nine well-preserved macro-specimens of maize. All specimens except one (a carbonized cob corresponding to specimen SM4) were morphologically analyzed and sampled for accelerator mass spectrometry (AMS) dating. The most ancient specimen (SM10) was dated 4240 ± 30 ^{14}C years BP (5300 to 5040 2σ calibrated age years BP at 95% confidence). Three other specimens found in distinct sedimentary quadrants (SM3, SM5, and SM9) were dated 4220 to 4180 ^{14}C years BP (5300 to 4970 2σ calibrated age years BP at 95% confidence). Three additional specimens (SM6, SM7, and SM8) were dated 3550 to 3500 ^{14}C years BP (about 4350 to 3990 calibrated years BP), and two (SM1 and SM2) were dated 1350

to 1310 ^{14}C years BP (about 1540 to 1400 calibrated years BP ; Table S1). In the case of the four most ancient specimens, SM9 and SM10 were two cobs morphologically reminiscent to those found in Zone E during the MacNeish expedition. These cobs had a fragile rachis and eight rows of kernels, as most of the cobs previously found in Zone E (*1*); their length was 34 and 30 mm, respectively. Their spikelet glumes were soft and long, confirming that the earliest maize found in San Marcos was tunicated; whereas SM10 was a complete cob devoided of kernels, the glumes of SM9 were missing in about one third of the apical portion, and folded back in the mid-region, suggesting manual removal of seeds. By contrast, SM3 was a well-preserved basal stalk fragment devoided of tillers with an estimated stem diameter of 20 mm. It included the first aerial internode and a basal portion containing the primary root system and close to 15 secondary roots. Finally, SM5 was an aerial leaf sheet containing part of the internode and a basal portion of a husk fragment that appeared to have been chewed. These results show that the new exploration of San Marcos cave yielded a small collection of non-manipulated specimens that are equivalent in age and state of preservation to some of the specimens originally collected during the MacNeish expedition, and currently preserved in several private or public collections.

Sequencing of Ancient Samples.

Three SOLiD (for SM3 and SM10) and four indexed Illumina (SM3, SM5, and SM10) DNA libraries were built for subsequent shotgun sequencing. In summary, fragment length distributions in the aDNA extracts were determined with a High Sensitivity DNA Assay Chip Kit (Agilent, Waldborn Germany) on a Bioanalyzer 2100. Size-based selection targeting 100 bp DNA fragments (size select) was performed using Agencourt® AMPure® XP (Beckman & Coulter Inc, California USA) according to manufacturer's instructions. Genomic libraries were constructed using Illumina TruSeq Nano DNA LT library prep kit (cat no. FC-121-4001) and SOLiD library preparation 5500 series kit (SOLiD, Part Number. 4460960 Rev. A), with 9 cycles of PCR for each library amplification. Fragmentation steps were avoided. DNA library concentration was quantified by qPCR and using a Bioanalyzer assay. Detailed results are shown in Supplementary Table S2. SOLiD libraries were sequenced at the Genomic Core Facility of PennState University, and Illumina libraries were sequenced at Langebio CINVESTAV or the Core Services at the University of California at Davis. SOLiD color space libraries were filtered to remove all reads with missing bases and converted to standard base space fastq-format files using SoliD2std.pl.

Read Processing, Mapping, and Genotyping.

Index sequences of 16 nucleotides were used to tag libraries described above. Only reads with the correct index were used in downstream analysis. All libraries were filtered to remove adaptors and low quality reads using Cutadapt (*2*) and keeping reads longer than 50 bp with a quality above 10 Phred score. Repetitive adenines (A) and thymines (T) were invariably removed from read ends. Filtered reads were mapped using the BWA MEM algorithm with default conditions (*3)*. *Zea mays* B73 RefGen_v3 (*4*) was used as the reference sequence after masking repetitive genomic regions with RepeatMasker (*5*). Reads with multiple hits were removed using *SAMtools* map quality filters. As a clonal removal strategy, sequence duplication in reads was filtered with the *rmdup* function of *SAMtools* (*6*), and sequences were locally re-aligned around insertion/deletions (indels) using GATK IndelRealigner (*7*). A map quality filter of a minimum value of 20 Phred score was applied in order to eliminate reads with low certainty assignments. This resulted in an average Phred score of 51 for SM10 and 50 for SM3, and a mapping efficiency of 15.19% for SM10 and 2.18% for SM3. SNP and genotype calling was performed as previously described *(8-10*). Variation information was extracted and called using the *mpileup* and *bcftools* functions of *SAMtools* (*6*), generating a VCF file containing genotypes based on a majority rule and requiring a minimal depth-of-coverage of 2.

Metagenomic Analysis and Postmortem Damage.

Cytosine deamination rates and fragmentation patterns were estimated using mapDamage2.1 (*11*) based on all reads mapping to the B73 reference genome, revealing expected patterns of postmortem damage in the form of C>T substitutions at the 5' termini, and G>T substitutions at the 3' termini. The excess of purines observed near read-termini furthermore supports fragmentation driven by depurination (Figure S1). All Indels and sites behaving as molecular damage (CG->TA) (*12,13*) were excluded. A metagenomic filter was applied in order to discard reads that aligned to sequences in the GenBank NCBI database of all bacterial and fungal genomes using default mapping quality parameters of BWA (*3*).

Evolutionary Analysis and SNP Genotype Comparisons.

Patterns of divergence were analyzed by generating maximum likelihood (ML) trees using Treemix (*14*) and the intersection of SNPs passing quality filters for the ancient specimens and 44 selected individuals of the publically available database HapMap3 without imputation (*15*). The list of selected individuals is presented in Table S3. The topologies were generated with each ancient sample individually or including both samples together. In each case, no less than 10,000 bootstrap pseudoreplicas were generated with a parallelized version of a public script (*16*), which uses the *sumtree* function in *DendroPy* (*17*) to obtain a consensus ML bootstrapped tree. The same SNP alignments were also used to assign the identity of each ancient SNP genotype to shared or exclusive SNP genotypes of the selected HapMap3 individuals. According to their SNP identity, the ancient genotypes were assigned exclusively to one of six categories: B73 genotypes, maize landraces genotypes, *Zea mays* ssp. *parviglumis*, *Zea mays* ssp. *mexicana*, *Tripsacum dactyloides*, or those not present in the dataset. Neighbor-joining topologies were generated on the basis of 100,540 shared SNPs between SM10, SM3 and HapMap3 that were concatenated for each genotype and imported into MEGA 7 software (*18*). Analysis was performed by applying the p-distance method and uniform rates at all transition and transversion sites, applying a test based on 1000 replicates of the bootstrap method. A pairwise deletion method was applied on missing data, and resulting trees were visualized using figtree software.

Nucleotide Variability and Frequency of Segregating Sites at Domestication Loci.

The genomic coordinates of selected loci previously reported as affected by domestication were obtained from B73 RefGen_V3 from MaizeGDB (*4,19*). All SNPs represented in HapMap3 (*15*) from more than 1,180 extant maize and 18 Balsas teosinte accessions were identified and compared to quality mapped sequences obtained for SM10. *Zea mays ssp. mexicana* was excluded to avoid any overestimation of nucleotide diversity in the teosintes. For each HapMap3 mapping to a 20 Kb region spanning a selected gene known to be affected by domestication, the corresponding nucleotide variant from SM10 was identified and compared to all nucleotide variants present in the Balsas teosinte or extant maize accessions. The relative frequency of each allele present in at each independent site was plotted, assigning the same color to identical nucleotide variants present in extant maize, Balsas teosinte and SM10. Color assignment is independent at each site. Additionally, the average value of the genetic diversity index θ was calculated for each class (Balsas teosinte and extant maize), and compared to the θ value for SM10 and *Palomero toluqueño*. For estimation of the frequency

of segregating sites per individual (FSSI) at each locus, the number of independent sites showing at least two nucleotide variants was divided by the total number of sites covered, and subsequently divided by the total number of accessions in each group for either Balsas teosinte or extant maize. In the case of Hufford et al. regions previously identified as having a general tendency to be selected during domestication (*20*), filtered reads mapping to these regions defined segments of SM10 coverage that were used to calculate the genetic diversity index θ for maize landraces (23 accessions) and Balsas teosinte (15 accessions). θ values were compared using the Kolmorov-Smirnov non-parametric test (KS test); a false discovery rate (FDR) was applied to p values obtained for the KS test with a 0.05 cut-off value. Only segments having a FDR<0.05 were considered for θ comparison between landraces and SM10, by correcting significance values for null hypothesis using an R library described as p.adjust. Since no formal tests of likelihood can be calculated without a distribution for ancient maize (SM10 represents a single sample), we compared the value of θ in SM10 to the one sigma θ value interval for the landraces as a test for significance.

Estimation of identity by descent (IBD).

Identity by descent (IBD) was calculated using *plink* V1.9 (*21*) using either all single nucleotide variants common ancient samples (in pairwise comparisons) or all heterozygous SNPs shared between ancient maize samples and B73. To avoid any bias caused by low-depth coverage, only bi-allelic sites with at least 10X depth coverage were used for IBD calculation in all pairwise comparisons between SM3, SM5, and SM10.

Table S1. Radiocarbon and calibrated dates of new maize specimens from San Marcos cave.

Sample	Quadrant[a]	^{14}C years BP	2σ calibrated age in years BP (95% probability)	Beta Analytic number
SM1(cob)	W3	1310 ± 30	1530-1390	320307
SM2 (cob)	W3	1350 ± 30	1540-1400	320308
SM3 (stalk)	W3	4190 ± 30	5280-4970	320309
SM5 (stem)	N1E2	4220 ± 30	5300-4980	320310
SM6 (cob)	N1E2	3500 ± 30	4220-3990	320311
SM7 (cob)	N1E2	3550 ± 30	4350-4100	320312
SM8 (cob)	N1E2	3530 ± 30	4280-4090	320313
SM9 (cob)	N1E3	4180 ± 30	5280-4970	320314
SM10 (cob)	N1E3	4240 ± 30	5300-5040	320315

[a]Following coordinates described in (*1*)

Table S2. Paleogenomic characterization of two ancient maize samples from San Marcos cave.

	Samples	
	SM3	**SM10**
Total number of raw reads	409,649,605	386,927,757
Total number of quality sequences	388,358,866	234,153,813
Number of sequences mapping to genome	8,479,668	35,590,282
Number of sequences mapping to repetitive regions	4,650,627	15,828,361
Number of sequences mapping to the unique genome	3,829,041	19,761,921
Total length (Mb)	310.12	1,260.23
Average read length (bp)	93	92
Total coverage (Mb)	65.58	185.18
Estimated coverage	0.14	0.59

Table S3. Distribution, coverage and depth of total mapped reads from SM3 and SM10 ancient maize samples across the 10 chromosomes of the B73 maize reference genome.

	SM3			SM10		
	Total number of reads	**Coverage**	**Average depth**	**Total number of reads**	**Coverage**	**Average depth**
Chr1	9,934,506	0.13	2.02	28,168,682	0.51	2.90
Chr2	7,626,361	0.29	2.70	21,853,753	1.19	3.85
Chr3	6,991,742	0.11	1.71	20,151,454	0.45	2.47
Chr4	7,381,639	0.12	1.96	21,020,485	0.50	2.79
Chr5	7,042,229	0.14	2.12	20,031,226	0.54	2.90
Chr6	5,451,536	0.17	2.31	15,348,616	0.71	3.25
Chr7	5,243,329	0.11	1.79	14,956,469	0.46	2.53
Chr8	5,493,136	0.11	1.76	15,566,233	0.43	2.48
Chr9	5,224,301	0.17	1.97	14,470,658	0.66	3.03
Chr10	4,543,792	0.13	1.83	12,924,842	0.54	2.62

Table S4. Total number of unique genomic sites covered at variable depths in SM3 and SM10 ancient maize samples

Depth	SM3	SM10
1	41,420,620	88,078,128
2	16,083,544	46,494,648
3	3,946,553	22,845,457
4	2,026,559	11,431,780
5	690,923	5,819,978
6	404,726	3,098,243
7	207,294	1,787,255
8	139,704	1,110,243
9	94,134	14,444
10	72,221	16,277
>10	488,693	597,616

Table S5. Description of all HapMap3 and ancient maize genotypes included in this study.

Sample	Line	ID	Race	Category	Class	Country	Accession (source) of origin	Selfing generation
1	TIL01	JD	Balsas	Parviglumis	TIL	Mexico	JSG Y LOS-130 (INIFAP)	-
2	TIL01	TIP-281	Balsas	Parviglumis	TIL	Mexico	JSG Y LOS-130 (INIFAP)	S5
3	TIL02	TIP-301	Balsas	Parviglumis	TIL	Mexico	JSG Y LOS-119 (INIFAP)	S2
4	TIL03	TIP-282	Jalisco	Parviglumis	TIL	Mexico	JSG Y MAS-401 (INIFAP)	S5
5	TIL04	TIP-285	Balsas	Parviglumis	TIL	Mexico	8783 (CIMMYT)	S5
6	TIL04	TIP-454	Balsas	Parviglumis	TIL	Mexico	8783 (CIMMYT)	S5
7	TIL05	TIP-287	Balsas	Parviglumis	TIL	Mexico	JSG-197 (INIFAP)	S5
8	TIL06	TIP-260	Balsas	Parviglumis	TIL	Mexico	JSG Y LOS-109 (INIFAP)	S3
9	TIL06	TIP-496	Balsas	Parviglumis	TIL	Mexico	JSG Y LOS-109 (INIFAP)	S6
10	TIL07	TIP-305	Balsas	Parviglumis	TIL	Mexico	JSG-378 (INIFAP)	S4
11	TIL08	TIP-293	Balsas	Mexicana	TIL	Mexico	JSG-374 (INIFAP)	S5
12	TIL09	TIP-265	Balsas	Parviglumis	TIL	Mexico	JSG Y LOS-161 (INIFAP)	S4
13	TIL10	TIP-304	Balsas	Parviglumis	TIL	Mexico	11355 (CIMMYT)	S4
14	TIL11	TIP-296	Jalisco	Parviglumis	TIL	Mexico	JSG Y MAS-264 (INIFAP)	S6
15	TIL12	TIP-267	Balsas	Parviglumis	TIL	Mexico	PI566686 (NCRPIS)	S4
16	TIL14	TIP-498	Jalisco	Parviglumis	TIL	Mexico	967 (BFB)	S6
17	TIL15	TIP-276	Balsas	Parviglumis	TIL	Mexico	K Site 4 (TAK)	S4
18	TIL16	TIP-309	Balsas	Parviglumis	TIL	Mexico	BK Site 4 (GWB)	S4
19	TIL17	TIP-272	Balsas	Parviglumis	TIL	Mexico	W Site 6 (HGW)	S4
20	TIL25	TIP-489	Central Plateau	Mexicana	TIL	Mexico	11066 (LMP)	S5
21	VEN 568 (NRC)	VEN 568 (NRC)	Araguito	Landrace	LRI	Venezuela	VEN 568 (NRC)	S4
22	PI213793 (NCRPIS)	PI213793 (NCRPIS)	Assiniboine	Landrace	LRI	USA	PI213793 (NCRPIS)	S6
23	OAX 68 (INIFAP)	OAX 68 (INIFAP)	Bolita	Landrace	LRI	Mexico	OAX 68 (INIFAP)	S5
24	BOV 635 (NRC)	BOV 635 (NRC)	Cateto	Landrace	LRI	Bolivia	BOV 635 (NRC)	S5
25	SIN 2 (INIFAP)	SIN 2 (INIFAP)	Chapalote	Landrace	LRI	Mexico	SIN 2 (INIFAP)	S5
26	CHS 86 (INIFAP)	CHS 86 (INIFAP)	Comiteco	Landrace	LRI	Mexico	CHS 86 (INIFAP)	S5
27	VEN 453 (ICA)	VEN 453 (ICA)	Costeno	Landrace	LRI	Venezuela	VEN 453 (ICA)	S5
28	RGS VII (CIMMYT)	RGS VII (CIMMYT)	Cravo Riograner	Landrace	LRI	Brazil	RGS VII (CIMMYT)	S5
29	CHI 349 (NCGRP)	CHI 349 (NCGRP)	Cristalino Norte	Landrace	LRI	Chile	CHI 349 (NCGRP)	S5
30	CUB 65 (CIMMYT)	CUB 65 (CIMMYT)	Cuban Flint	Landrace	LRI	Cuba	CUB 65 (CIMMYT)	S5
31	PI317675 (NCRPIS)	PI317675 (NCRPIS)	Havasupai	Landrace	LRI	SW USA	PI317675 (NCRPIS)	S6
32	PI311237 (NCRPIS)	PI311237 (NCRPIS)	Hickory King	Landrace	LRI	USA	PI311237 (NCRPIS)	S7
33	PI217408 (NCRPIS)	PI217408 (NCRPIS)	Longfellow Flint	Landrace	LRI	USA	PI217408 (NCRPIS)	S5
34	BOV 344 (ICA)	BOV 344 (ICA)	Pisankalla	Landrace	LRI	Bolivia	BOV 344 (ICA)	S5
35	NAY 15 (INIFAP)	NAY 15 (INIFAP)	Reventador	Landrace	LRI	Mexico	NAY 15 (INIFAP)	S5
36	PI218130 (NCRPIS)	PI218130 (NCRPIS)	Santa Domingo	Landrace	LRI	SW USA	PI218130 (NCRPIS)	S6
37	PI269743 (NCRPIS)	PI269743 (NCRPIS)	Shoe Peg	Landrace	LRI	USA	PI269743 (NCRPIS)	S6
38	JAL 43 (CIMMYT)	JAL 43 (CIMMYT)	Tabloncillo	Landrace	LRI	Mexico	JAL 43 (CIMMYT)	S5
39	TAM 125 (INIFAP)	TAM 125 (INIFAP)	Tuxpeno	Landrace	LRI	Mexico	TAM 125 (INIFAP)	S5
40	OAX 70 (CIMMYT)	OAX 70 (CIMMYT)	Zapalote Chico	Landrace	LRI	Mexico	OAX 70 (CIMMYT)	S5
41	AYA 32 (PCIM)	AYA 32 (PCIM)	Chullpi	Landrace	LRI	Peru	AYA 32 (PCIM)	S4
42	BOV 587 (NRC)	BOV 587 (NRC)	Poropo	Landrace	LRI	Bolivia	BOV 587 (NRC)	S4
43	B73	B73	B73	Improved	SS	-	-	-
44	SM3		-	Ancient Maize	-	Mexico	San Marcos Cave, Tehuacan Valley	-
45	SM5	-	-	Ancient Maize	-	Mexico	San Marcos Cave, Tehuacan Valley	-
46	SM10	-	-	Ancient Maize	-	Mexico	San Marcos Cave, Tehuacan Valley	-

Table S6. Gene identity, number of sites with SM10 coverage, and average number of modern maize and Balsas teosinte accessions included per each domestication locus used in this study.

Locus[a]	Gene ID	Number of sites with SM10 aDNA coverage	Average number of extant maize accessions	Average number of Balsas teosinte accessions
tb1	AC233950.1_FG002/ZEAMMB73_005119	610	1,184.59	14.6
tga1	GRMZM2G101511/ZEAMMB73_160040	557	1,184.59	14.6
su1	GRMZM2G138060/ZEAMMB73_396292	429	1,184.53	14.69
bt2	GRMZM2G068506/ZEAMMB73_161490	346	1,184.08	14.95
SMS37	GRMZM2G021270/ZEAMMB73_229730	629	1,185.18	14.90
SMS40	GRMZM2G028258/ZEAMMB73_388919	330	1,169.68	14.63
SMS43	GRMZM2G126545/ZEAMMB73_381600	732	1,185.89	14.86
arf1	GRMZM2G378580/ZEAMMB73_247628	345	1,182.19	14.54

[a]INDELs were discarded from the analysis

Table S7. Comparison of θ at each selected locus affected by domestication.

	θ value			
	Extant Maize[a]	**Palomero**	**Balsas Teosinte[a]**	**SM10**
teosinte branched1	0.0219±0.018	0.0107	0.0366±0.03	0.005
brittle endospem2	0.0319±0.021	0.012	0.1727±0.04	0.033
sugary1	0.0247±0.01	0.0129	0.1221±0.041	0.042
auxin response factor1	0.0414±0.04	0.018	0.1679±0.086	0.089
SMS37	0.0267±0.013	0.008	0.085±0.041	0.084
SMS40	0.138±0.11	0.1728	0.1378±0.11	0.077
SMS43	0.0196±0.013	0.0511	0.0983±0.051	0.082
teosinte glume architecture1	0.037±0.033	0.019	0.19±0.031	0.092

[a]In the cases of extant maize and Balsas teosinte, the estimate represents the average of the genetic diversity index θ per individual for more than 1,180 maize accessions at 15 Balsas teosinte individuals, respectively. Values in blue represent a deviation from the 1 sigma range of extant maize.

Table S8. Frequency of segregating sites per individual.

		Frequency of segregating sites per individual [a]		
	Number of sites with SM10 aDNA coverage	**Extant Maize**	**Balsas Teosinte**	**SM10**
teosinte branched1	9215	14.88±24	89.38±109	2
brittle endospem2	2909	39.30±44.72	44.83±49.38	14
sugary1	10616	10.6±19.38	56.66±61.49	57
SMS37	12787	18.86±34.95	62.77±76.65	67
SMS40	5651	53.09±56.99	54.27±59.22	33
SMS43	11164	15.50±27.12	81±95.39	81
teosinte glume architecture1	8410	24.01±40.98	127.5±136.12	52

[a]For extant maize and Balsas teosinte, the average takes in consideration all pairwise comparisons between each individual and B73, across a region of 25Kb spanning each selected gene.

Table S9. Genetic diversity within maize regions previously identified as being under selection during domestication (ref. *20*).

ID	Region Coordinates	Mean θ Region	St. Deviation Region	Mean θ Segment	St. Deviation Segment	θ for SM10	FDR Teosintes vs Landraces	Coverage SM10
Region302	9:134410001-134490000	0.001535	0.007392	0.020455	0.018408	0.06326	0.00001	411
Region42	4:48250001-49230000	0.003644	0.015765	0.042844	0.038693	0.093886	0.000012	3909
Region453	2:170200001-17110000	0.00168	0.010081	0.035357	0.043536	0.079108	0.000237	493
Region283	3:51360001-51870000	0.002341	0.015152	0.072311	0.057804	0.147651	0.001941	2086
Region423	8:1-30000	0.001355	0.009722	0.038551	0.031786	0.073171	0.001941	164
Region411	10:126010001-126130000	0.002875	0.013936	0.031808	0.0508	0.09872	0.007204	547
Region452	10:26690001-27390000	0.00173	0.011383	0.044128	0.048805	0.101042	0.000025	2207
Region16	5:114160001-122680000	0.001736	0.008585	0.02831	0.013431	0.015912	0	26333
Region11	1:4760001-4950000	0.008363	0.01777	0.036143	0.015947	0.017661	0	1642
Region138	5:97870001-99430000	0.004437	0.02255	0.071225	0.020358	0.047341	0.000001	5661
Region152	4:100000001-101890000	0.000876	0.007135	0.034026	0.034922	0.014848	0.000001	4468
Region38	6:126150001-127580000	0.006111	0.018351	0.028122	0.0195	0.007369	0.000001	8006
Region1	4:112830001-116940000	0.002982	0.016922	0.067068	0.042896	0.043761	0.000003	13391
Region150	4:95050001-97740000	0.0059	0.019836	0.052606	0.021887	0.033991	0.000003	8767
Region18	3:12340001-12740000	0.001881	0.012109	0.07376	0.014347	0.058824	0.000006	3825
Region37	3:180960001-181560000	0.006248	0.015906	0.049385	0.015222	0.016402	0.000006	5914
Region249	2:35850001-36810000	0.001234	0.009423	0.050892	0.028862	0.0557	0.000008	5763
Region23	1:57460001-57990000	0.007302	0.022696	0.04532	0.045888	0.031025	0.000008	3062
Region230	5:85560001-85970000	0.014401	0.029654	0.051657	0.042673	0.041911	0.000008	2219
Region131	4:89430001-89960000	0.014815	0.04517	0.048145	0.063783	0.036397	0.000008	1621
Region155	1:217600001-218040000	0.006895	0.025118	0.089105	0.026563	0.057855	0.00001	4252
Region159	5:165100001-165320000	0.009349	0.027055	0.030499	0.053987	0.047737	0.00001	1613
Region107	1:103000001-104260000	0.007671	0.025218	0.085085	0.03523	0.104961	0.000012	5745
Region51	5:123520001-126900000	0.003023	0.014533	0.045986	0.029022	0.062107	0.000012	13992
Region165	4:158160001-158960000	0.005593	0.022755	0.109824	0.024801	0.066806	0.000012	6676
Region25	4:186260001-193090000	0.002296	0.016753	0.120781	0.008208	0.071284	0.000017	59971
Region30	1:182970001-183510000	0.00934	0.028249	0.081504	0.022853	0.035527	0.000017	3434
Region187	5:42410001-42930000	0.001645	0.011828	0.064873	0.037937	0.06843	0.00002	3025
Region334	8:147110001-147230000	0.001434	0.008369	0.02115	0.032933	0.00094	0.00002	1064
Region55	4:31000001-31120000	0.002194	0.018943	0.099441	0.057803	0.128427	0.000025	693
Region10	1:157290001-157870000	0.000911	0.009756	0.046903	0.068211	0.102305	0.000025	1779
Region359	1:175520001-175710000	0.001792	0.012798	0.096053	0.044082	0.071373	0.000025	1289
Region253	10:101220001-102230000	0.002901	0.013729	0.048849	0.048027	0.037435	0.000025	5583
Region174	10:24970001-25180000	0.002316	0.012741	0.042643	0.041715	0.04398	0.000032	2774
Region109	1:26820001-27040000	0.004238	0.025216	0.079796	0.038978	0.052281	0.000032	1052
Region63	9:14400001-14560000	0.020283	0.03343	0.08079	0.029163	0.053097	0.000032	1356
Region380	6:145260001-145480000	0.004447	0.016536	0.041895	0.040646	0.008049	0.000032	3106
Region92	3:124500001-124940000	0.005331	0.03021	0.12685	0.009816	0.045586	0.000046	1733
Region330	4:43430001-44330000	0.003596	0.018981	0.076082	0.054129	0.037742	0.000056	5988
Region189	9:1350001-1430000	0.016896	0.031629	0.052211	0.055836	0.102076	0.000075	578
Region8	1:14350001-14450000	0.001827	0.014998	0.080196	0.040681	0.039341	0.000075	1881
Region184	2:162380001-162760000	0.000948	0.007862	0.030925	0.034368	0.010052	0.000075	2288
Region245	10:76560001-76950000	0.00686	0.027555	0.110808	0.04449	0.107163	0.000097	3462
Region239	6:98510001-98620000	0.00394	0.020182	0.086333	0.034318	0.073684	0.000097	1615
Region110	3:195780001-195970000	0.015052	0.037815	0.09666	0.054562	0.086806	0.000097	1728
Region58	1:56330001-56540000	0.001194	0.009332	0.077974	0.031849	0.043605	0.000097	688
Region326	8:2192001-2210000	0.02719	0.056922	0.110354	0.025636	0.073835	0.000097	1395
Region59	4:64920001-67290000	0.003603	0.021882	0.12462	0.024862	0.067696	0.000134	14890
Region136	3:182690001-182840000	0.002122	0.014245	0.068152	0.041392	0.039705	0.000134	1763
Region431	1:2850001-2930000	0.002123	0.014787	0.076997	0.025984	0.065574	0.000152	1342
Region268	1:287470001-287550000	0.00331	0.018569	0.073201	0.058266	0.050505	0.000152	594
Region140	4:40530001-41600000	0.010741	0.029571	0.05127	0.05942	0.033415	0.000152	4100
Region327	4:146410001-146560000	0.118132	0.062203	0.092038	0.033872	0.097087	0.000152	412
Region277	6:88460001-88540000	0.00228	0.015429	0.067414	0.075878	0.03641	0.000178	780
Region324	5:87230001-87470000	0.001472	0.011248	0.049117	0.059144	0.048832	0.000178	1413
Region318	4:32090001-32330000	0.020246	0.043182	0.128218	0.036811	0.091831	0.000178	1677
Region193	1:15370001-15540000	0.002705	0.017469	0.098753	0.051096	0.047593	0.000178	1807
Region33	6:810001-1000000	0.002156	0.012323	0.068406	0.029177	0.038573	0.000178	1037
Region70	1:263810001-263900000	0.000992	0.008058	0.04693	0.05318	0.025292	0.000178	514
Region219	1:49520001-49840000	0.001229	0.010756	0.06678	0.044389	0.009839	0.000178	3354
Region78	6:83750001-84030000	0.003174	0.015029	0.059173	0.036435	0.010031	0.000178	2592
Region275	6:94930001-95190000	0.002927	0.016976	0.077001	0.045463	0.009002	0.000178	1222
Region45	10:124770001-124840000	0.002944	0.010864	0.021483	0.043694	0	0.000178	320
Region294	6:132040001-132180000	0.01506	0.040857	0.094884	0.057249	0.014644	0.000178	1912
Region444	4:47440001-47880000	0.002235	0.0164	0.100542	0.036716	0.063816	0.000195	3181
Region166	3:29870001-30660000	0.002973	0.019935	0.100383	0.021843	0.060283	0.000195	5723
Region74	4:29210001-29700000	0.002266	0.016945	0.070586	0.032594	0.048133	0.000195	3241
Region353	6:143350001-143620000	0.010749	0.034714	0.08262	0.026355	0.065841	0.00032	1777
Region198	5:159230001-159490000	0.002812	0.017246	0.101157	0.041339	0.034692	0.00032	2969
Region418	10:105200001-105850000	0.049022	0.026539	0.042634	0.031414	0.017887	0.00032	4193
Region262	8:23490001-23680000	0.006859	0.023	0.098507	0.050286	0.105528	0.000376	597
Region77	2:48150001-48520000	0.009291	0.030865	0.116776	0.046737	0.055456	0.000376	3354
Region116	10:117810001-118280000	0.006621	0.026217	0.087634	0.048732	0.042507	0.000376	4164
Region183	3:179220001-179770000	0.002571	0.015939	0.10354	0.022359	0.089529	0.000402	5797
Region261	6:149290001-149390000	0.004067	0.017929	0.079921	0.034878	0.086368	0.000402	961
Region282	6:27170001-28580000	0.003201	0.020871	0.099195	0.016373	0.062005	0.000402	8080
Region7	5:68760001-69340000	0.001786	0.011631	0.048745	0.028775	0.021381	0.000402	2853
Region9	8:24400001-24750000	0.03401	0.034565	0.068987	0.041618	0.073617	0.000402	2350
Region208	5:53870001-54200000	0.007415	0.024281	0.066939	0.04804	0.04326	0.000478	994
Region335	9:143560001-143600000	0.057591	0.046547	0.045824	0.055104	0.046117	0.000478	412
Region317	1:192200001-192840000	0.001149	0.010237	0.066133	0.036715	0.030909	0.000533	3850
Region367	3:203330001-203400000	0.039306	0.037882	0.069085	0.024455	0.068878	0.000533	392
Region344	5:94180001-96390000	0.006075	0.02361	0.072921	0.027119	0.045177	0.000625	8013
Region83	10:136730001-136760000	0.007061	0.023546	0.082849	0.043496	0.034321	0.000625	641
Region186	6:166550001-166680000	0.047854	0.026408	0.040463	0.050235	0.0525	0.000625	400
Region303	4:157590001-158120000	0.004149	0.021916	0.126478	0.017367	0.075649	0.000696	4468
Region293	5:41700001-42070000	0.02351	0.045548	0.077465	0.035893	0.072967	0.000696	1672
Region325	4:71480001-72670000	0.002474	0.019566	0.141502	0.034921	0.102977	0.000771	6584
Region383	8:3870001-4080000	0.005449	0.022153	0.095613	0.034425	0.081783	0.000771	2311
Region311	1:187950001-188190000	0.002344	0.016712	0.121196	0.025259	0.068525	0.000771	3444
Region362	6:102390001-102430000	0.003475	0.018513	0.084394	0.047657	0.06994	0.000771	672
Region319	1:23280001-23640000	0.003081	0.017095	0.081091	0.028304	0.064085	0.000771	2918
Region143	1:61160001-61770000	0.001198	0.010887	0.103875	0.034855	0.050201	0.000771	5956
Region290	1:123820001-128390000	0.002363	0.01504	0.061407	0.042976	0.029559	0.000771	15427
Region449	1:187510001-187710000	0.04521	0.054807	0.122272	0.036979	0.077508	0.000771	1316
Region313	5:51330001-52390000	0.003695	0.017853	0.086075	0.04096	0.045757	0.000905	6010
Region395	2:158870001-159690000	0.009037	0.034579	0.105867	0.043498	0.060409	0.000905	7085
Region112	5:161250001-161980000	0.003387	0.016257	0.060798	0.059567	0.005756	0.000905	5386
Region229	2:45650001-45860000	0.003701	0.024065	0.151123	0.059545	0.11379	0.000976	1037
Region402	6:8800001-9150000	0.002034	0.010344	0.04445	0.059329	0.071645	0.000976	991
Region351	6:111310001-111890000	0.003025	0.01941	0.109677	0.025726	0.05184	0.000976	6385
Region222	4:26950001-27290000	0.013211	0.038099	0.089938	0.036142	0.052198	0.000976	1820
Region321	1:58610001-58740000	0.009839	0.031368	0.096185	0.066745	0.00801	0.000976	1623
Region19	2:35270001-35800000	0.017174	0.032794	0.070081	0.053064	0.072783	0.001155	1951
Region454	1:48130001-48530000	0.001105	0.011868	0.090569	0.096256	0.009249	0.001155	2811
Region203	6:146410001-146530000	0.0039	0.014884	0.061185	0.047013	0.079545	0.00127	704
Region458	3:23640001-23720000	0.005917	0.027105	0.082704	0.033076	0.07839	0.00127	472
Region98	1:173450001-173870000	0.003586	0.026661	0.127782	0.023242	0.061617	0.00127	1769
Region71	4:166500001-167650000	0.002434	0.014861	0.098817	0.018241	0.066908	0.001486	8549
Region139	2:41530001-41680000	0.003531	0.024005	0.116875	0.030581	0.064311	0.001486	1415
Region125	3:12250001-12320000	0.004345	0.022686	0.119952	0.055267	0.044685	0.001486	1477
Region278	1:215360001-215570000	0.001758	0.015942	0.125355	0.04188	0.048901	0.001941	1820
Region387	9:21330001-21520000	0.004168	0.015778	0.06075	0.022059	0.030986	0.001941	710
Region169	2:135220001-135790000	0.006829	0.028367	0.048273	0.028262	0.056204	0.002149	1886
Region287	9:120650001-120820000	0.013121	0.038071	0.198756	0.109571	0.049608	0.002149	383
Region21	1:17920001-18080000	0.001436	0.012051	0.073123	0.044919	0.041294	0.002261	1453
Region363	4:10220001-10430000	0.001061	0.008716	0.085307	0.026923	0.059617	0.00248	2298
Region461	6:137300001-137470000	0.002863	0.013217	0.055585	0.05405	0.059452	0.00248	1736
Region79	1:22920001-23200000	0.006806	0.028355	0.117885	0.017665	0.062794	0.00248	2341
Region316	3:11420001-11490000	0.004224	0.020206	0.13364	0.061508	0.072125	0.002908	513
Region430	4:150001-530000	0.001074	0.00861	0.096682	0.032103	0.043295	0.002908	947
Region377	6:116080001-116400000	0.004183	0.027739	0.156175	0.021679	0.132859	0.003185	1829
Region158	7:3550001-3590000	0.018742	0.052599	0.16045	0.046282	0.171271	0.003185	362
Region409	8:151030001-151090000	0.001603	0.01079	0.043934	0.045403	0.039711	0.003185	554
Region141	7:165340001-165470000	0.020574	0.047656	0.120899	0.026705	0.060057	0.003753	2814
Region462	2:211800001-211870000	0.002505	0.019889	0.09748	0.046807	0.059701	0.004138	1340
Region132	4:13320001-13650000	0.012476	0.029209	0.113614	0.067944	0.049533	0.004138	1070
Region197	5:66560001-66970000	0.001864	0.015709	0.067034	0.058387	0.100742	0.004821	1618
Region93	8:121770001-122130000	0.016	0.037409	0.079213	0.026987	0.028183	0.004821	1987
Region390	5:182380001-182540000	0.004957	0.025847	0.103421	0.027105	0.096639	0.005225	952
Region103	1:42360001-42640000	0.000835	0.007069	0.077302	0.029019	0.06	0.005225	1100
Region238	8:21080001-21130000	0.002486	0.013913	0.06905	0.072136	0.053691	0.005225	447

ID	Region Coordinates	Mean θ Region	St. Deviation Region	Mean θ Segment	St. Deviation Segment	θ for SM10	FDR Teosintes vs Landraces	Coverage SM10
Region129	2:20340001-20440000	0.014493	0.036897	0.059939	0.031402	0.005831	0.005225	343
Region315	8:64940001-65250000	0.024907	0.040275	0.086003	0.061248	0.055288	0.005481	416
Region205	3:181650001-181860000	0.003261	0.021551	0.141705	0.025429	0.088786	0.005938	3255
Region182	4:19490001-19680000	0.002668	0.015114	0.073734	0.03334	0.07172	0.005938	1227
Region332	5:86420001-87030000	0.003379	0.021393	0.150917	0.057179	0.034392	0.005938	2268
Region445	9:1450001-1520000	0.070783	0.057318	0.09446	0.037743	0.078313	0.005938	498
Region200	3:184330001-184410000	0.011872	0.040933	0.131838	0.036137	0.150588	0.006526	850
Region354	4:165580001-165750000	0.004087	0.022441	0.106992	0.035884	0.060653	0.006526	2605
Region385	1:256420001-256460000	0.001297	0.012765	0.088362	0.093905	0.14375	0.006649	160
Region457	1:250970001-251110000	0.003052	0.019504	0.13091	0.075336	0.124714	0.006649	874
Region137	6:80990001-81530000	0.012163	0.048801	0.1605	0.063107	0.090801	0.006649	2533
Region432	4:12820001-12850000	0.001623	0.016885	0.071774	0.081246	0.024311	0.006649	617
Region274	10:82540001-82740000	0.009583	0.030922	0.077109	0.063572	0.006458	0.006649	2013
Region298	2:41730001-41940000	0.002273	0.015802	0.122115	0.04059	0.141797	0.007204	1213
Region295	1:12170001-12210000	0.003486	0.02123	0.109058	0.036856	0.10261	0.007204	1111
Region61	7:141630001-141760000	0.005585	0.030701	0.139011	0.038101	0.086197	0.007204	1659
Region451	4:18220001-18300000	0.006632	0.028507	0.111297	0.036883	0.073389	0.009199	1567
Region466	8:13860001-14030000	0.003807	0.020801	0.089108	0.046392	0.00799	0.009199	1627
Region43	1:233680001-233860000	0.090759	0.036287	0.084145	0.041836	0.060185	0.009199	864
Region233	7:155760001-155930000	0.005721	0.0282	0.14816	0.054983	0.071028	0.01061	2140
Region371	8:157510001-157680000	0.017393	0.048119	0.117227	0.0382	0.078282	0.01061	2095
Region378	1:194410001-194520000	0.00338	0.01624	0.056822	0.032659	0.05857	0.011532	1622
Region75	4:179780001-180290000	0.001521	0.01067	0.076483	0.030366	0.040306	0.011532	3920
Region113	3:221190001-221320000	0.004517	0.024923	0.126537	0.031152	0.057066	0.011532	2243
Region168	5:67970001-68430000	0.033947	0.055051	0.131577	0.067747	0.133144	0.011906	1765
Region195	6:66210001-67040000	0.003312	0.019089	0.09726	0.051916	0.047387	0.011906	5951
Region366	5:187310001-187440000	0.002433	0.018789	0.075172	0.085061	0.002671	0.011906	1123
Region358	3:9170001-9200000	0.003287	0.021858	0.114261	0.096566	0.112245	0.012774	392
Region286	2:31070001-31410000	0.002724	0.016737	0.124261	0.044559	0.084308	0.012774	2052
Region211	4:179140001-179310000	0.001273	0.013496	0.126177	0.067933	0.074349	0.012774	269
Region365	3:149570001-149880000	0.00257	0.017694	0.100136	0.036126	0.043921	0.012774	1571
Region300	6:1130001-1220000	0.021497	0.027722	0.056525	0.027008	0.024793	0.012774	121
Region435	6:93840001-93940000	0.001696	0.012294	0.08879	0.052272	0.09009	0.014038	444
Region221	1:26460001-26680000	0.001197	0.010562	0.093348	0.041437	0.085106	0.014321	1222
Region376	4:231730001-231850000	0.002714	0.020445	0.100003	0.064817	0.093207	0.014321	1081
Region14	1:281010001-281450000	0.003329	0.02022	0.122562	0.038417	0.086057	0.014321	4834
Region428	7:69820001-71210000	0.002799	0.01567	0.052877	0.0422	0.024383	0.014321	3568
Region56	4:13920001-14010000	0.039223	0.044043	0.065368	0.03674	0.02921	0.014321	582
Region12	1:230690001-231600000	0.002857	0.019594	0.136515	0.028192	0.089234	0.015448	8954
Region226	4:175350001-175580000	0.002224	0.015994	0.08639	0.029159	0.058909	0.015448	2071
Region17	10:111380001-111420000	0.006006	0.030117	0.145114	0.032048	0.071597	0.015448	3394
Region32	3:201090001-201550000	0.004332	0.024236	0.144546	0.030061	0.057978	0.015448	6261
Region263	9:145380001-145510000	0.005688	0.024195	0.100537	0.03522	0.096133	0.016845	905
Region87	10:124150001-124650000	0.006894	0.029196	0.121478	0.030499	0.099436	0.016845	5139
Region52	1:174840001-175130000	0.002066	0.014603	0.103375	0.038551	0.105124	0.017196	1132
Region100	8:21490001-21630000	0.002414	0.013997	0.112659	0.053839	0.089124	0.017196	662
Region323	6:130930001-131060000	0.005734	0.027847	0.08912	0.095527	0.061684	0.017196	843
Region429	1:219930001-220080000	0.00441	0.023241	0.099277	0.073421	0.03151	0.017196	1682
Region416	8:15930001-15980000	0.010329	0.042498	0.119753	0.112119	0.012547	0.017196	797
Region464	3:190070001-190160000	0.002794	0.018232	0.093631	0.044157	0.092534	0.018632	951
Region104	2:194930001-195270000	0.003409	0.020748	0.121573	0.037742	0.082334	0.018632	3085
Region213	9:106280001-106440000	0.009769	0.031887	0.095464	0.02872	0.083055	0.018632	2095
Region296	2:22430001-22460000	0.003527	0.022249	0.116562	0.049247	0.106299	0.021155	508
Region372	1:255200001-255240000	0.023821	0.0408	0.11555	0.052918	0.068548	0.021155	496
Region448	2:192610001-192670000	0.005026	0.029057	0.119689	0.093656	0.029126	0.021155	721
Region370	5:211730001-211770000	0.003044	0.021765	0.107863	0.043514	0.088382	0.022759	1403
Region69	6:15590001-16800000	0.004142	0.023904	0.105416	0.040892	0.080496	0.022759	3789
Region285	8:120550001-120610000	0.006924	0.026367	0.007246	0.019131	0	0.022759	18
Region135	9:121850001-121930000	0.030818	0.059867	0.163667	0.066715	0.032475	0.022759	893
Region281	8:23050001-23100000	0.005172	0.02008	0.153207	0.058456	0.139241	0.025117	158
Region417	1:58410001-58510000	0.003341	0.022261	0.124165	0.044226	0.083584	0.025117	1328
Region60	4:171310001-171560000	0.003751	0.01757	0.092565	0.040888	0.077955	0.025117	1565
Region64	9:118260001-118480000	0.008782	0.034297	0.109349	0.063332	0.064049	0.025117	2623
Region47	2:27800001-27870000	0.001894	0.010842	0.047536	0.013537	0.02847	0.025117	281
Region118	5:79610001-80090000	0.008709	0.033437	0.144652	0.058443	0.0541	0.025117	2329
Region145	8:18390001-18420000	0.006131	0.022125	0.10191	0.103629	0.028571	0.025117	105
Region438	1:187150001-187240000	0.00447	0.028075	0.091236	0.087869	0.005854	0.025117	1879
Region204	9:103800001-104260000	0.015196	0.04384	0.121802	0.021691	0.086005	0.027261	5209
Region102	4:170060001-170130000	0.006504	0.027788	0.059037	0.060234	0.025397	0.027261	315
Region94	2:61000001-61150000	0.0138	0.040489	0.144533	0.083217	0.168161	0.028114	446
Region246	1:47100001-47230000	0.008156	0.036746	0.127811	0.09113	0.044053	0.028114	908
Region106	8:156540001-156570000	0.006974	0.024622	0.05284	0.050313	0.021583	0.028114	278
Region242	7:128560001-128960000	0.005781	0.028515	0.143407	0.036371	0.10452	0.030477	3894
Region357	4:28020001-28190000	0.004197	0.023244	0.124018	0.047045	0.087356	0.030477	1740
Region299	1:196400001-196440000	0.004609	0.023953	0.089096	0.030796	0.060721	0.032389	527
Region72	5:160340001-160720000	0.009568	0.033292	0.097698	0.032093	0.059815	0.032389	3143
Region347	4:183080001-183200000	0.02098	0.059354	0.135616	0.068712	0.047745	0.032389	754
Region340	3:205090001-205120000	0.053637	0.088668	0.081011	0.054745	0.064725	0.032389	309
Region209	7:115480001-115610000	0.111988	0.088105	0.176601	0.038419	0.119835	0.032389	484
Region244	2:189410001-189490000	0.100437	0.024494	0.08561	0.023493	0.043514	0.032389	1218
Region338	8:22180001-22300000	0.002513	0.01518	0.098002	0.071537	0.100394	0.033233	508
Region421	1:48940001-48970000	0.001129	0.012874	0.063867	0.065996	0.078292	0.033233	281
Region31	3:6330001-6420000	0.008523	0.031911	0.152066	0.095423	0.095238	0.033233	294
Region348	4:177130001-177220000	0.002938	0.019702	0.111341	0.081101	0.035313	0.033233	623
Region460	1:211120001-211470000	0.002086	0.016163	0.113168	0.02872	0.068573	0.035798	3427
Region215	6:123710001-123970000	0.016378	0.045087	0.110252	0.026648	0.058224	0.035798	2353
Region154	2:150710001-150980000	0.049771	0.065779	0.155932	0.06338	0.096261	0.035798	1257
Region196	4:165770001-165860000	0.029185	0.041379	0.080957	0.059861	0.121212	0.0406	165
Region46	2:22650001-22810000	0.084847	0.064409	0.134064	0.037066	0.09327	0.044036	1694
Region419	6:93530001-93620000	0.004377	0.028245	0.147933	0.096168	0.162617	0.045538	535
Region85	8:145400001-146340000	0.004065	0.025376	0.146197	0.065127	0.083614	0.045538	1782
Region292	8:11050001-11180000	0.003804	0.022978	0.074683	0.081374	0.097444	0.052676	626
Region20	2:157420001-157930000	0.007413	0.03264	0.118968	0.047448	0.109168	0.052676	4232
Region13	2:211670001-211780000	0.011158	0.041527	0.104897	0.060412	0.080074	0.052676	537
Region95	2:221050001-221140000	0.012286	0.037076	0.106909	0.03416	0.053521	0.052676	1420
Region160	7:144550001-145260000	0.039654	0.048795	0.12179	0.03437	0.071287	0.052676	6537
Region62	2:33610001-33820000	0.002114	0.015242	0.11729	0.036982	0.043011	0.054423	1953
Region235	2:20150001-20220000	0.003711	0.023675	0.086491	0.073169	0	0.054423	74
Region225	3:180560001-180630000	0.004739	0.024696	0.12014	0.041014	0.114202	0.058565	683
Region153	2:32540001-32710000	0.00452	0.028076	0.145943	0.046062	0.084675	0.058565	1925
Region397	6:148760001-148800000	0.003615	0.0218	0.130093	0.028252	0.085161	0.062967	775
Region134	2:231790001-231810000	0.005685	0.028288	0.153004	0.104051	0.027397	0.062967	146
Region401	1:276780001-276840000	0.001841	0.01613	0.13702	0.060476	0.166667	0.064177	72
Region128	1:262740001-262740000	0.009861	0.032956	0.125855	0.039633	0.080013	0.064177	2410
Region447	4:46790001-47020000	0.002204	0.019226	0.126662	0.086626	0.054359	0.064177	1950
Region162	10:11960001-12090000	0.003628	0.021679	0.160355	0.128396	0.041801	0.064177	311
Region234	2:193710001-193770000	0.00262	0.014904	0.061896	0.06037	0.012987	0.064177	154
Region191	6:130680001-130730000	0.002563	0.017836	0.155878	0.084582	0.032178	0.068921	404
Region269	6:148700001-148740000	0.033057	0.052175	0.121538	0.037883	0.089249	0.068921	493
Region389	4:178950001-179050000	0.0229	0.070582	0.141822	0.014548	0.096026	0.073952	302
Region192	2:72610001-73440000	0.030577	0.058419	0.148303	0.047584	0.077829	0.073952	5602
Region310	4:23250001-23480000	0.003043	0.019205	0.136139	0.052063	0.137846	0.075648	2423
Region272	10:115100001-115310000	0.012544	0.037167	0.139672	0.042637	0.128959	0.075648	1326
Region391	9:96430001-96730000	0.005874	0.030356	0.116273	0.040551	0.096761	0.075648	2377
Region291	6:154510001-154650000	0.006191	0.025219	0.097635	0.027608	0.077482	0.075648	1652
Region157	5:214860001-214900000	0.044306	0.042565	0.105991	0.057051	0.181579	0.080746	380
Region399	8:109960001-109990000	0.00293	0.013101	0.071374	0.055739	0.110063	0.080746	318
Region114	2:164790001-165480000	0.004914	0.027837	0.161614	0.036835	0.073348	0.080746	3163
Region171	5:77830001-78420000	0.003445	0.022923	0.136202	0.06415	0.078093	0.082903	2894
Region218	4:203640001-203760000	0.002438	0.018887	0.071732	0.053802	0.051095	0.082903	548
Region217	4:236560001-236620000	0.001435	0.011631	0.059654	0.029506	0.017094	0.082903	468
Region386	9:16590001-16610000	0.003921	0.016517	0.101929	0.031102	0.076923	0.08445	91
Region6	9:120860001-121070000	0.010232	0.03308	0.093288	0.043694	0.088522	0.08445	1974
Region101	1:274380001-274640000	0.006055	0.023142	0.10905	0.025839	0.047543	0.08445	1872
Region148	1:266770001-266830000	0.002966	0.026111	0.162045	0.039702	0.032197	0.08445	528
Region237	10:72030001-72360000	0.030793	0.059056	0.143941	0.042582	0.05737	0.08445	1133
Region80	4:20940001-21010000	0.0028	0.023593	0.092488	0.059826	0.090164	0.086697	122
Region424	1:196930001-197110000	0.026694	0.055968	0.117502	0.063817	0.103261	0.086697	1472
Region170	4:210630001-210780000	0.004133	0.024838	0.117955	0.060476	0.036405	0.086697	879
Region388	1:254220001-254290000	0.005367	0.030246	0.082509	0.061931	0.029891	0.093087	368
Region312	3:188610001-188650000	0.009346	0.036725	0.162165	0.028976	0.134576	0.095513	483
Region124	5:185690001-185850000	0.003532	0.021383	0.118266	0.04604	0.051673	0.095513	2032
Region339	1:235110001-235280000	0.00279	0.020266	0.10874	0.03074	0.049394	0.095513	1073
Region360	7:108380001-108780000	0.009605	0.033117	0.127277	0.029687	0.10138	0.108896	3117
Region149	7:170360001-170980000	0.005506	0.028707	0.143681	0.011962	0.093072	0.108896	8602
Region194	3:20520001-20880000	0.006486	0.030674	0.144831	0.028763	0.066318	0.108896	2488
Region115	7:137490001-137700000	0.029276	0.046023	0.099539	0.030003	0.051448	0.108896	2935
Region258	5:72480001-73410000	0.004466	0.025109	0.141503	0.056599	0.085656	0.110017	4448
Region379	6:110850001-110910000	0.003182	0.021139	0.115655	0.043991	0.076223	0.110017	879
Region446	8:100580001-100640000	0.017564	0.03614	0.099094	0.069092	0.097166	0.110017	247
Region256	7:13310001-13430000	0.008004	0.031636	0.143092	0.061018	0.079498	0.110017	1434
Region122	7:153550001-153700000	0.017679	0.050196	0.121059	0.059086	0.063235	0.110017	2040
Region5	6:90160001-90440000	0.001709	0.012192	0.088459	0.078651	0.008013	0.110017	624
Region119	3:180090001-180140000	0.124288	0.044676	0.122206	0.077079	0.045902	0.110017	305
Region44	10:139130001-139370000	0.005254	0.024432	0.137081	0.024897	0.089571	0.124916	2378
Region412	5:142000001-142270000	0.005045	0.024798	0.079831	0.049467	0.076224	0.124916	1430
Region406	4:22290001-22340000	0.004828	0.028122	0.179288	0.026284	0.039216	0.124916	153
Region84	5:206060001-206460000	0.02013	0.046286	0.134175	0.021052	0.064687	0.124916	4916

ID	Region Coordinates	Mean θ Region	St. Deviation Region	Mean θ Segment	St. Deviation Segment	θ for SM10	FDR Teosintes vs Landraces	Coverage SM10
Region333	8:158120001-158200000	0.001907	0.013115	0.061685	0.03013	0	0.128874	62
Region374	7:7970001-8060000	0.006747	0.030129	0.139718	0.032199	0.075325	0.137565	385
Region343	1:279940001-279980000	0.002299	0.018837	0.144958	0.043603	0.102484	0.140339	1288
Region341	5:28350001-28480000	0.002635	0.020015	0.141412	0.067744	0.088576	0.140339	1987
Region382	4:172820001-172860000	0.0022	0.015378	0.108078	0.072548	0.07772	0.140339	193
Region255	4:28310001-28540000	0.0021	0.017113	0.124901	0.042182	0.040404	0.140339	1980
Region123	3:157110001-157230000	0.005029	0.025973	0.110424	0.043706	0.106557	0.149601	488
Region400	1:24410001-24570000	0.001608	0.013721	0.116302	0.069478	0.076591	0.158226	1854
Region368	7:25080001-25560000	0.015019	0.044618	0.145467	0.060797	0.101672	0.158226	2990
Region227	2:27300001-27390000	0.008505	0.034775	0.151276	0.045267	0.079268	0.158226	820
Region147	4:241630001-241650000	0.00489	0.020882	0.041787	0.028959	0.043478	0.162952	161
Region251	3:9270001-9310000	0.001999	0.015179	0.100448	0.052739	0.094842	0.171545	601
Region164	3:147560001-147720000	0.00482	0.027838	0.143634	0.049698	0.095052	0.171545	1536
Region459	4:153300001-153360000	0.015013	0.049969	0.101319	0.059965	0.125858	0.171545	437
Region381	10:13910001-13950000	0.059677	0.123054	0.201258	0.143166	0.117949	0.171545	195
Region3	3:143830001-144130000	0.003019	0.021062	0.11888	0.032433	0.057445	0.182283	1323
Region248	3:180170001-180210000	0.002792	0.021634	0.185096	0.142891	0.113475	0.183201	282
Region361	3:170190001-170370000	0.010328	0.032351	0.10061	0.058129	0.116078	0.183201	1387
Region81	2:28980001-29530000	0.003515	0.024085	0.161067	0.02275	0.100116	0.183201	6053
Region415	2:212580001-212920000	0.001935	0.014565	0.1109	0.032827	0.069713	0.183201	2123
Region90	7:39310001-40580000	0.013549	0.042506	0.137155	0.034963	0.092495	0.183201	9341
Region307	1:286350001-286490000	0.011718	0.039631	0.13146	0.035934	0.087306	0.183201	1741
Region180	10:113470001-113770000	0.009407	0.035391	0.158157	0.059729	0.074136	0.183201	2401
Region66	3:209020001-209130000	0.038726	0.061732	0.149302	0.042299	0.089578	0.183201	1161
Region4	6:87040001-87490000	0.005074	0.030434	0.168615	0.071943	0.109567	0.191897	1223
Region120	5:155920001-156450000	0.002797	0.019471	0.12702	0.05371	0.090958	0.191897	3727
Region40	4:160850001-161340000	0.007878	0.030794	0.109914	0.033262	0.062793	0.191897	3838
Region214	6:97610001-97770000	0.002108	0.011801	0.090992	0.0612	0.030806	0.191897	422
Region232	1:267410001-267470000	0.004786	0.02944	0.160007	0.034946	0.050251	0.191897	995
Region172	4:14590001-14660000	0.004746	0.024723	0.160069	0.026561	0.098782	0.20023	739
Region394	1:256480001-256620000	0.004449	0.025537	0.122178	0.027319	0.098104	0.20023	2110
Region96	2:214970001-215440000	0.002189	0.01446	0.117086	0.033491	0.065934	0.20023	2639
Region76	2:226460001-226650000	0.01375	0.039256	0.16196	0.0484	0.07911	0.20023	1934
Region250	6:3060001-3200000	0.007362	0.026492	0.148492	0.038862	0.047504	0.20023	1242
Region355	9:5040001-5160000	0.026521	0.063529	0.204785	0.0652	0.014268	0.20023	2453
Region270	4:210950001-211560000	0.004446	0.02534	0.137941	0.029261	0.082779	0.204487	5714
Region48	6:19200001-19550000	0.004154	0.021196	0.143736	0.099299	0.05113	0.204487	841
Region65	9:148540001-148800000	0.009293	0.034861	0.122958	0.032449	0.063874	0.204487	2411
Region425	5:201570001-201770000	0.019696	0.057319	0.170473	0.032473	0.120157	0.214505	1781
Region413	5:203300001-203320000	0.006915	0.026789	0.082266	0.03854	0.067708	0.214505	192
Region39	9:129720001-129880000	0.014976	0.039618	0.118423	0.047881	0.080378	0.214505	1269
Region450	9:107920001-108040000	0.02258	0.049558	0.174659	0.057842	0.07967	0.214505	728
Region206	2:60830001-60920000	0.003955	0.023612	0.106253	0.067986	0.121637	0.218956	855
Region271	3:24130001-24360000	0.010369	0.035605	0.132979	0.046191	0.081736	0.218956	991
Region82	2:163040001-163860000	0.007145	0.039028	0.119202	0.060207	0.081036	0.218956	3628
Region266	1:33760001-33870000	0.002801	0.019331	0.151487	0.05706	0.067535	0.224836	1229
Region337	6:70840001-71290000	0.003424	0.021159	0.1261	0.060356	0.069938	0.230822	2588
Region404	8:9600001-9650000	0.126171	0.030401	0.115465	0.031515	0.012232	0.243853	327
Region439	6:86320001-86380000	0.011935	0.03544	0.105134	0.045108	0.135514	0.249415	428
Region181	9:133200001-133290000	0.005449	0.032818	0.156089	0.114987	0	0.249415	24
Region284	10:106840001-107630000	0.008959	0.04205	0.16659	0.05329	0.130719	0.253526	4131
Region161	8:144810001-145080000	0.003895	0.022046	0.114648	0.025374	0.064516	0.253526	3007
Region117	4:6840001-6910000	0.001513	0.011242	0.078462	0.038125	0.041971	0.253526	548
Region68	1:197690001-197890000	0.017065	0.041479	0.111866	0.045812	0.06137	0.253526	2379
Region127	3:196200001-196480000	0.003595	0.021918	0.131897	0.035066	0.056494	0.273226	3611
Region375	3:22830001-22950000	0.005095	0.03192	0.238673	0.03605	0.046748	0.273226	984
Region342	10:136510001-136530000	0.002792	0.018099	0.078673	0.082794	0	0.273226	50
Region212	3:229430001-230220000	0.010719	0.039137	0.144605	0.01963	0.092593	0.28	10206
Region392	2:129520001-130020000	0.004816	0.033064	0.184363	0.053099	0.097011	0.285195	1773
Region393	1:231660001-231810000	0.013876	0.050912	0.127886	0.023338	0.085772	0.285195	991
Region356	8:144410001-144490000	0.00493	0.019845	0.110686	0.068158	0.005051	0.285195	198
Region247	2:14230001-14260000	0.005206	0.031908	0.167578	0.073511	0.120715	0.30722	671
Region26	1:23080001-23840000	0.003209	0.020965	0.138229	0.041993	0.048778	0.30722	2009
Region130	7:158560001-158750000	0.00474	0.025682	0.167988	0.092981	0.106262	0.335889	527
Region35	5:84530001-85240000	0.004712	0.028115	0.166443	0.060018	0.084731	0.335889	3340
Region276	4:136400001-137120000	0.00306	0.020431	0.116622	0.059494	0.067371	0.335889	3028
Region210	4:145260001-145400000	0.002055	0.016549	0.122911	0.03409	0.057592	0.335889	1337
Region105	5:61510001-61900000	0.012699	0.039702	0.141944	0.039706	0.065542	0.335889	2548
Region384	2:202460001-202540000	0.002655	0.020144	0.142898	0.068577	0.108571	0.341562	175
Region146	1:24680001-24770000	0.003792	0.019664	0.106202	0.037281	0.08093	0.341562	1075
Region465	5:189640001-189800000	0.223547	0.076523	0.159164	0.051738	0.080663	0.341562	905
Region53	1:217040001-217270000	0.002477	0.021603	0.157575	0.044316	0.126655	0.345324	2795
Region167	1:27060001-27200000	0.001958	0.017187	0.147625	0.030046	0.089096	0.345324	3962
Region297	5:164440001-164730000	0.005161	0.023495	0.123174	0.077506	0.047281	0.345324	2961
Region301	3:13590001-13630000	0.012777	0.039778	0.155064	0.029836	0.069164	0.345324	347
Region178	7:111660001-111820000	0.109863	0.049074	0.170105	0.076441	0.061916	0.345324	856
Region320	3:214910001-214930000	0.004842	0.022399	0.116529	0.048363	0.099548	0.361826	221
Region279	5:214720001-214740000	0.003486	0.019903	0.070167	0.032143	0.024691	0.369724	81
Region133	2:47730001-47930000	0.008821	0.034309	0.133127	0.034695	0.074505	0.376659	1718
Region36	8:4450001-4510000	0.035119	0.063361	0.148084	0.063361	0.102371	0.376659	928
Region364	7:153740001-153800000	0.006726	0.030184	0.134415	0.032737	0.1224	0.383646	1250
Region22	7:143290001-143960000	0.00369	0.021562	0.141916	0.045358	0.08787	0.383646	5713
Region265	7:154930001-154950000	0.008398	0.032495	0.152608	0.071318	0.081712	0.401052	257
Region73	7:145440001-145720000	0.029788	0.060741	0.170257	0.080825	0.122826	0.409343	1840
Region403	3:22390001-22590000	0.009914	0.042124	0.160919	0.038411	0.119428	0.414304	1189
Region185	5:177850001-177930000	0.005095	0.026561	0.131993	0.05076	0.041131	0.414304	1167
Region111	2:218400001-218540000	0.004946	0.024862	0.095923	0.059519	0.025278	0.414304	989
Region440	9:96280001-96390000	0.00997	0.052147	0.25331	0.094467	0.052805	0.414304	303
Region426	3:189640001-190010000	0.009412	0.037302	0.143647	0.053513	0.10844	0.421543	3993
Region28	8:107220001-107530000	0.006534	0.031936	0.149254	0.05739	0.086735	0.421543	1176
Region254	1:284920001-285130000	0.001734	0.014879	0.14002	0.061768	0.123298	0.445847	1322
Region15	7:160280001-160470000	0.005301	0.029558	0.149003	0.031067	0.093787	0.445847	3412
Region190	4:162750001-162860000	0.004401	0.0216	0.11232	0.061362	0.081169	0.445847	616
Region433	2:40390001-40460000	0.004085	0.023753	0.151397	0.08409	0.018315	0.445847	546
Region179	5:174230001-174670000	0.003509	0.021944	0.142878	0.023417	0.093124	0.464363	4392
Region436	5:53310001-53480000	0.004543	0.027159	0.161591	0.078823	0.143455	0.468131	955
Region350	3:160920001-161020000	0.011213	0.037802	0.110972	0.072454	0.136483	0.468131	762
Region410	5:165480001-165660000	0.004716	0.030847	0.157118	0.0962	0.087558	0.468131	217
Region289	7:107530001-107750000	0.011159	0.052313	0.212324	0.109563	0.076171	0.468131	1431
Region2	7:114180001-114840000	0.008154	0.039297	0.193547	0.067871	0.054997	0.468131	3582
Region442	2:185990001-186100000	0.010728	0.037011	0.141957	0.032722	0.037929	0.476854	1951
Region407	9:145940001-146080000	0.006524	0.029555	0.134625	0.071857	0.049342	0.484361	1216
Region86	8:102500001-102970000	0.009225	0.035123	0.148767	0.054184	0.041824	0.484361	3180
Region305	4:229840001-230060000	0.007541	0.036735	0.143526	0.033399	0.108491	0.512231	2332
Region121	9:95050001-95390000	0.008121	0.034831	0.157238	0.060259	0.060866	0.512231	2333
Region29	4:236260001-236330000	0.002455	0.020034	0.150687	0.040029	0.075472	0.519832	1537
Region267	1:260800001-261300000	0.007586	0.034024	0.128323	0.049156	0.070428	0.519832	2712
Region202	5:192350001-192770000	0.006504	0.036399	0.145958	0.045283	0.083988	0.528796	3691
Region54	7:113880001-114150000	0.003045	0.019307	0.09702	0.036636	0.074866	0.546814	748
Region414	10:125660001-125790000	0.006566	0.03138	0.186999	0.041887	0.033058	0.546814	363
Region199	10:128520001-129010000	0.007678	0.03853	0.262965	0.177539	0.143312	0.553032	314
Region175	8:159460001-159720000	0.005129	0.024477	0.114697	0.027818	0.073207	0.553032	3333
Region49	3:133260001-133490000	0.006676	0.039141	0.188144	0.111036	0.066194	0.553032	1269
Region396	2:226030001-226110000	0.007272	0.036095	0.182013	0.029748	0.098876	0.557813	890
Region228	5:158170001-158570000	0.01267	0.060094	0.267511	0.025274	0.072305	0.557813	2282
Region216	10:5530001-5580000	0.059742	0.047443	0.137958	0.040099	0.102902	0.557813	379
Region280	7:14440001-14480000	0.011472	0.045147	0.197148	0.039937	0.013258	0.557813	528
Region97	1:229260001-229340000	0.004601	0.026326	0.168928	0.052431	0.149188	0.56538	677
Region241	9:122160001-122400000	0.005868	0.027406	0.124856	0.02875	0.072419	0.56538	1947
Region257	6:77220001-77350000	0.005135	0.026033	0.179137	0.046799	0.122667	0.583351	375
Region34	2:172380001-172610000	0.002755	0.019851	0.122072	0.03076	0.051064	0.583351	1410
Region231	5:50040001-50560000	0.024577	0.064256	0.194749	0.059186	0.123353	0.590875	2732
Region89	8:163150001-163240000	0.016586	0.042829	0.19134	0.048626	0.083612	0.590875	598
Region41	6:162420001-162540000	0.00656	0.032786	0.126729	0.03882	0.109827	0.596897	1211
Region405	5:212380001-212460000	0.008168	0.032621	0.13735	0.034515	0.059048	0.596897	1575
Region420	1:291070001-291110000	0.001288	0.009674	0.075832	0.036447	0	0.596897	87
Region240	3:122020001-122160000	0.014721	0.037154	0.092178	0.029732	0.048682	0.605834	1479
Region329	2:186440001-186490000	0.00505	0.027628	0.169077	0.050615	0.153846	0.608794	416
Region67	1:270450001-270770000	0.007986	0.036886	0.159165	0.048517	0.097191	0.608794	2634
Region259	7:146890001-147100000	0.006567	0.035969	0.174983	0.074301	0.055866	0.608794	1432
Region108	3:119610001-120110000	0.034012	0.064312	0.133483	0.042625	0.105005	0.608794	2857
Region345	2:225660001-225830000	0.002363	0.016432	0.147038	0.073726	0.023324	0.608794	343
Region308	6:78410001-78700000	0.015459	0.033677	0.089205	0.025079	0.012605	0.61764	238
Region441	5:4490001-4500000	0.003196	0.024279	0.099943	0.07015	0.050179	0.62647	279
Region173	3:190180001-190450000	0.003576	0.025568	0.148784	0.045927	0.104853	0.630721	2308
Region264	3:6780001-6930000	0.002941	0.020019	0.157344	0.024382	0.069067	0.630721	1361
Region201	7:104880001-105600000	0.011789	0.048159	0.187446	0.03409	0.084803	0.630721	6863
Region236	4:184470001-184530000	0.003444	0.015133	0.088835	0.023002	0.042857	0.630721	280
Region156	5:185320001-185430000	0.001853	0.012572	0.072053	0.020606	0.016181	0.649708	618
Region331	1:246720001-247030000	0.005659	0.031464	0.154614	0.041948	0.106984	0.69438	3150
Region463	9:139660001-139700000	0.0071	0.032292	0.1548	0.057061	0.07781	0.69438	347
Region151	10:136800001-136850000	0.055811	0.080266	0.189066	0.09668	0.171014	0.69438	345
Region91	4:200090001-200510000	0.013206	0.046817	0.155907	0.035534	0.086882	0.69438	4650
Region408	3:215310001-215350000	0.002981	0.01742	0.042284	0.111961	0	0.702856	14
Region437	4:140040001-140300000	0.002736	0.019804	0.194921	0.044227	0.133803	0.731327	284
Region456	1:296070001-296090000	0.001816	0.016291	0.095327	0.044133	0.032563	0.737831	952
Region398	1:191250001-191320000	0.005769	0.027495	0.122304	0.068774	0.005747	0.737831	348
Region288	7:109190001-109250000	0.042094	0.086892	0.198587	0.028789	0.095652	0.745974	115

ID	Region Coordinates	Mean θ Region	St. Deviation Region	Mean θ Segment	St. Deviation Segment	θ for SM10	FDR Teosintes vs Landraces	Coverage SM10
Region304	2:38360001-38580000	0.004396	0.028041	0.21355	0.046416	0.060516	0.758475	2016
Region163	8:157900001-157970000	0.008147	0.035237	0.157438	0.053414	0.045113	0.758475	665
Region243	6:14840001-15030000	0.013777	0.014214	0.042123	0.022146	0.01913	0.758475	575
Region369	1:207040001-207080000	0.004119	0.026336	0.170104	0.075976	0.010234	0.758475	684
Region443	2:220020001-220080000	0.008641	0.041351	0.185436	0.031857	0.103393	0.764559	619
Region336	10:136550001-136580000	0.002937	0.015267	0.265276	0.062892	0.045455	0.764559	44
Region24	8:160620001-160890000	0.005449	0.030435	0.142932	0.027043	0.087129	0.772297	2766
Region177	1:13070001-13100000	0.003129	0.025352	0.20728	0.034596	0.089888	0.776373	623
Region434	10:10410001-10620000	0.025813	0.053527	0.142831	0.02319	0.081809	0.776373	3007
Region346	7:40600001-40940000	0.014425	0.047587	0.199945	0.051597	0.039199	0.776373	1148
Region88	4:196680001-196770000	0.003722	0.023802	0.096461	0.029831	0.057092	0.811221	1121
Region349	3:199000001-199070000	0.009536	0.050103	0.186035	0.062225	0.116466	0.814592	498
Region427	9:8360001-8440000	0.009076	0.0364	0.126115	0.031325	0.090235	0.814592	809
Region144	3:193990001-194140000	0.009972	0.041593	0.164295	0.02791	0.091811	0.814592	2015
Region223	1:43850001-43930000	0.114271	0.087115	0.238797	0.053946	0.16	0.838729	125
Region328	6:77940001-78330000	0.006668	0.041889	0.22781	0.072446	0.133155	0.887188	1119
Region373	3:168470001-168540000	0.004981	0.026581	0.140732	0.032093	0.085139	0.887188	1292
Region252	4:161370001-161570000	0.002517	0.018943	0.131299	0.043079	0.072072	0.887188	1332
Region176	10:9750001-9790000	0.012636	0.043121	0.138591	0.055372	0.023569	0.887188	297
Region188	7:113240001-113620000	0.013868	0.050022	0.228654	0.074881	0.036947	0.920848	1651
Region99	6:110640001-110800000	0.036524	0.068167	0.146455	0.033744	0.134364	0.93816	841
Region322	1:229550001-229700000	0.004647	0.025925	0.120723	0.023801	0.086713	0.949852	2145
Region50	6:88020001-88320000	0.006015	0.035725	0.226104	0.043271	0.050151	0.949852	3310
Region352	1:181590001-181650000	0.00474	0.038381	0.261	0.074646	0.048872	0.949852	266
Region207	6:10180001-10350000	0.000974	0.006304	0.029617	0.015964	0	0.949852	206
Region57	1:285520001-285560000	0.001	0.007954	0	0	0	0.949852	8
Region273	2:34900001-35000000	0.02654	0.062115	0.142717	0.025819	0.070981	0.949852	479
Region314	10:125250001-125280000	0.005668	0.016829	0	0	0	0.949852	2
Region455	10:11450001-11520000	0.007074	0.016714	0	0	0	0.949852	1
Region126	4:157010001-157100000	0.003995	0.023214	0.149668	0.042127	0.092754	0.966728	345
Region309	5:185150001-185200000	0.006527	0.02133	0.080663	0.024987	0.017143	0.966728	175
Region224	4:165250001-165430000	0.003728	0.019151	0.086098	0.045769	0.01087	0.966728	276
Region27	7:136460001-136800000	0.005906	0.030355	0.21252	0.059705	0.138989	1	1108
Region306	2:205960001-206030000	0.000866	0.006453	0.034783	0.077511	0	1	5

Regions in green correspond to a θ difference between SM10 and extant landraces, i.e. beyond the 1 sigma value of for extant landraces within the shared segment (FDR Teosintes vs Landraces <0.05).

Regions in blue do not show a θ for SM10 beyond the 1 sigma value of for extant landraces within the shared segment (FDR Teosintes vs Landraces <0.05).

Regions in yellow show FDR Teosintes vs Landraces >=0.05 within the segment covered by SM10.

ID: Region number following reference (*20*).

Region Coordinates: chromosome number and B73 genomic coordinates for each region.

Mean θ Region: mean value of the θ index for maize landraces calculated for each region.

St. Deviation θ Region: standard deviation of the θ index for maize landraces calculated for each region.

Mean θ Segment: mean value of the θ index for maize landraces calculated for the segment covered by SM10 sequence.

St. Deviation θ Segment: standard deviation of the θ index for maize landraces calculated for the segment covered by SM10 sequence.

θ for SM10: value of θ for SM10 sequence within the segment.

FDR Teosintes vs Landraces: false discovery rate corresponding to a non-significant difference in genetic diversity between Balsas teosinte and extant landraces within the segment of SM10 coverage.

Coverage SM10: total length of the segment covered by SM10 sequence (in nucleotides).

Table S10. Comparison of single nucleotide polymorphic variants among ancient samples and extant maize.

Polymorphic sites

Sample comparisons	Identical nucleotide variant(s)		Half identical nucleotide variants		Distinct nucleotide variants			Total
Ancient[a]	(XX)(XX)	(XY)(XY)	(XX)(XY)	(XY)(XW)	(XX)(YY)	(XY)(WZ)	(XX)(WY)	
SM3 vs SM10	1,055,768	10,327	9,105	277	546	0	40	1,076,063
SM5 vs SM10	45,319	365	1,129	26	39	0	4	46,882
SM3 vs SM5	46,266	380	1,175	26	42	0	3	47,892
Total	1,147,353	11,072	11,409	329	627	0	47	1,170,837
Extant[b]								
CCH1 vs CCH2	301,234	431,245	395,322	349,211	270,575	532,457	187,309	2,467,353
CCH2 vs CCH3	277,488	306,109	339,105	378,798	291,439	497,234	201,764	2,291,937
CCH1 vs CCH3	322,673	388,203	265,340	328,344	332,961	512,601	177,252	2,327,374

[a]Comparison of three ancient samples from San Marcos cave.
[b]Comparison of three randomly selected *Cacahuacintle* individuals from an open-pollinated population of 4,500 plants.

Identity by Descent (IBD)

	Z0[a]	Z1[b]	Z2[c]	PI_HAT[d]
SM3 vs SM10	0.0028	0.0122	0.985	0.9911
SM3 vs SM5	0.01	0.0317	0.958	0.9742
SM5 vs SM10	0.0095	0.0315	0.959	0.9748

[a]Probability that at any given SNV 0 alleles are identical by descent
[b]Probability that at any given SNV 1 allele is identical by descent
[c]Probability that at any given SNV 2 alleles are identical by descent
[d]Proportion of IBD = P(IBD=2) + 0.5 P(IBD=1)

Table S11. Genetic comparison of single nucleotide polymorphic variants among three ancient maize samples.

	Polymorphic sites[a]							
Sample comparisons	Two Identical nucleotide variants		One identical nucleotide variant		Distinct nucleotide variants			Total
	(XX)(XX)	(XY)(XY)	(XX)(XY)	(XY)(XW)	(XX)(YY)	(XY)(WZ)	(XX)(WY)	
SM3 vs SM10	3,988	10,327	2,420	277	9	0	28	17,049
SM5 vs SM10	173	365	103	26	0	0	1	668
SM5 vs SM3	182	380	106	26	1	0	2	697
Total	4,343	11,072	2,629	329	10	0	31	18,414

[a]Polymorphic sites correspond to those having at least one identical variant with the B73 reference genome

Table S12. Estimation of heterozygosity in SM10, selected genotypes of HapMap3, and a maize open-pollinated landrace individual.

Genotype	Background	Number of Heterozygous SNPs (%)	Number of Rounds of Selfing
Comparison to HapMap3 genotypes[a]:			
SM10	ancient maize	541,304 (4.16)	unknown
RIMMA0428	open landrace	1,365,955 (10.51)	open-pollinated
TIL-10	teosinte inbred	553,520 (4.26)	4
BKN026	landrace inbred	232,685 (1.79)	5
Mo17	inbred line	179,071 (1.38)	multiple
Comparison to an extant open-pollinated individual[b]:			
SM10	ancient maize	4,741 (10.47)	unknown
CCH1	maize landrace	29,025 (64.1)	open-pollinated

[a]Based on 12,999,553 shared SNPs between the SM10 genome and selected members of the HapMap3 panel of diversity.

[b]Based on 45,281 shared polymorphic sites between SM10 and CCH1, as compared to the B73 reference genome

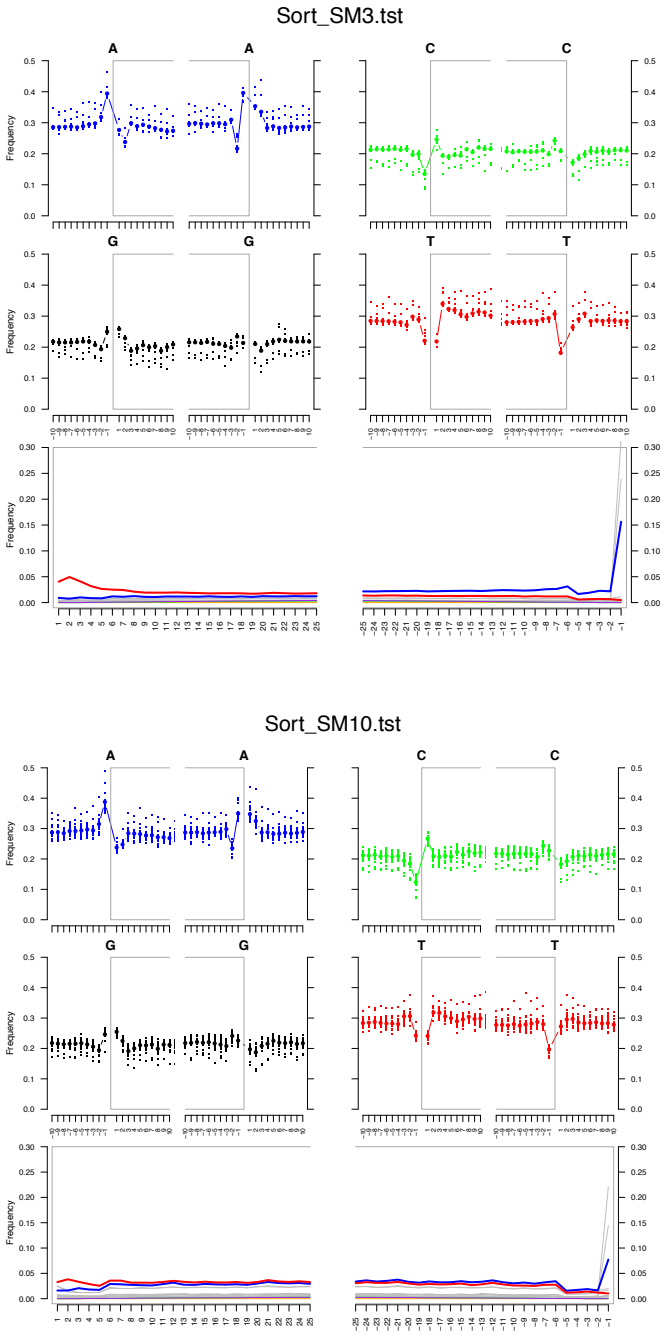

Figure S1. Post-mortem DNA damage and fragmentation patterns of ancient maize samples SM3 and SM10. DNA composition around read-termini (top four plots), and DNA mis-incorporation errors relative to the 5' and 3' read (bottom plot) ; the two distributions for *post-mortem* damage signatures (C>T and G>A) are shown in red and blue respectively, while other types of substitutions are shown in gray.

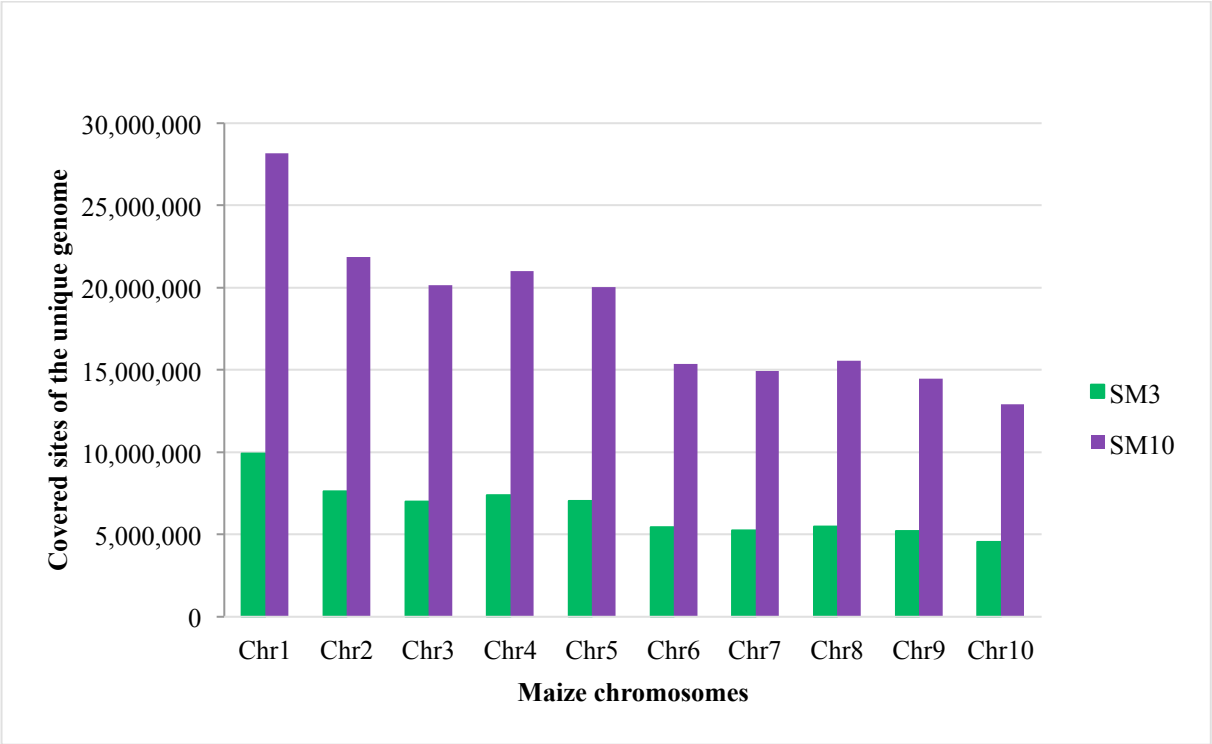

Figure S2. Total number of covered sites of the unique genome for SM3 and SM10 ancient maize samples.

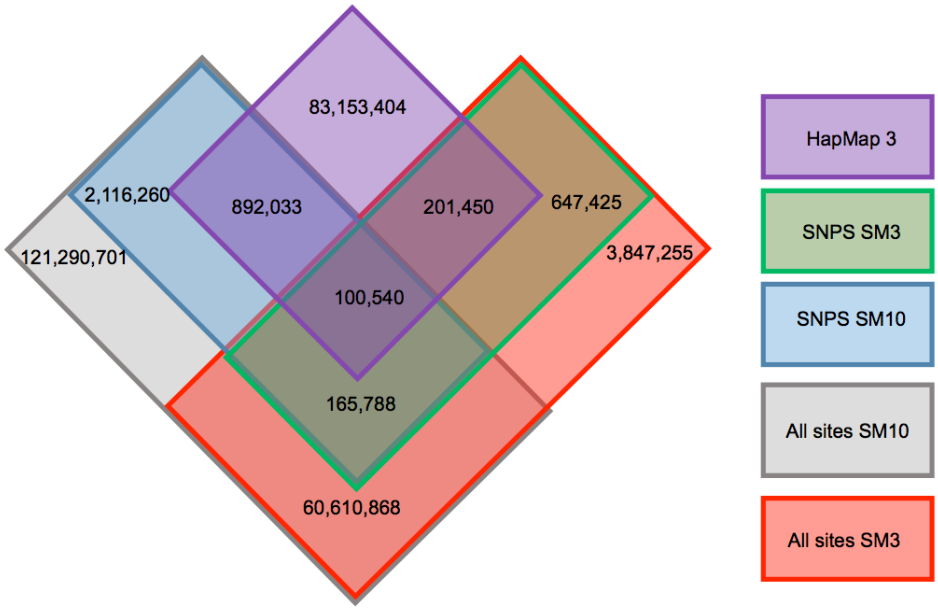

Figure S3. Venn diagram illustrating the distribution of SNPs shared by SM3, SM10, and the HapMap3 group of 15 Balsas teosinte and 22 extant maize landraces accessions (*15*).

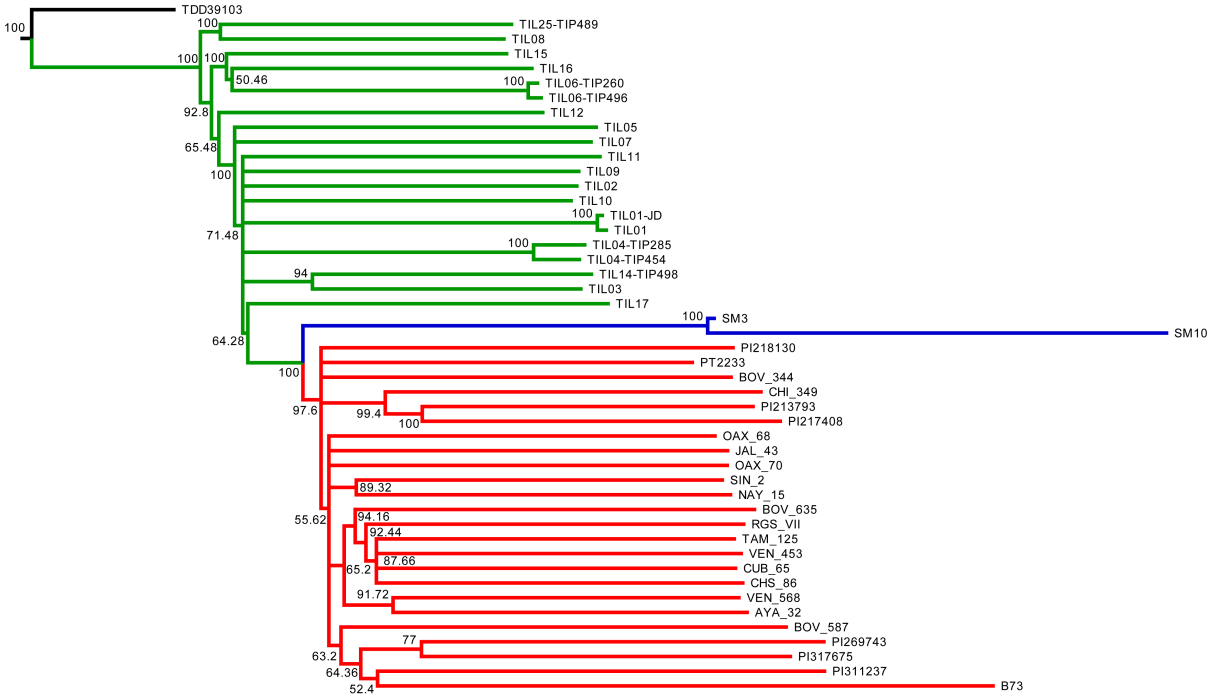

Figure S4. Evolutionary relationships between ancient Tehuacan maize and its wild or cultivated relatives. Maximum likelihood tree from an alignment of 100,540 genome-wide SNPs covering non-repetitive regions of the reference maize genome. SM3 and SM10 represent two maize samples dating 5300-4970 calibrated years BP; SNPs obtained from 77,960,582 mapped reads of the *Palomero Toluqueño* landrace (PT2233) were also included in the analysis. The teosinte and landrace accessions follow the previously reported nomenclature (*20*).

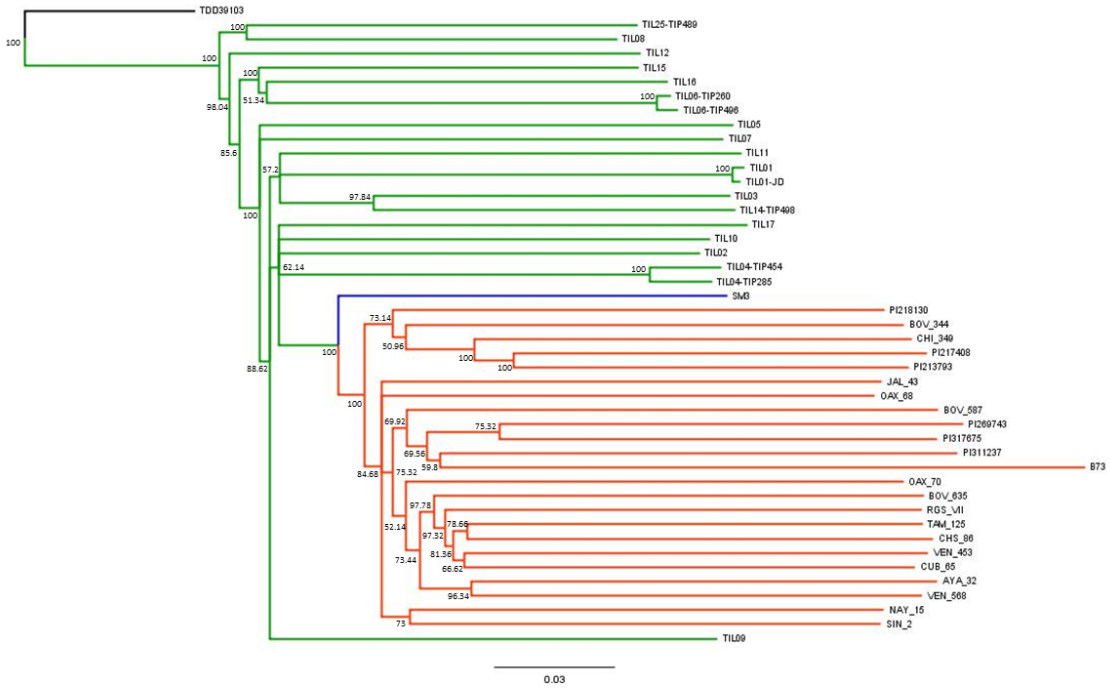

Figure S5. Evolutionary relationships between SM3 ancient maize and its wild or cultivated relatives. Maximum likelihood reconstruction from an alignment of 201,450 genome-wide SNPs covering non-repetitive regions of the reference maize genome. SM3 represents a maize sample dating 5280-4970 cal. years BP; the teosinte and landrace accessions follow the nomenclature reported in (*20*), and described in Table S5.

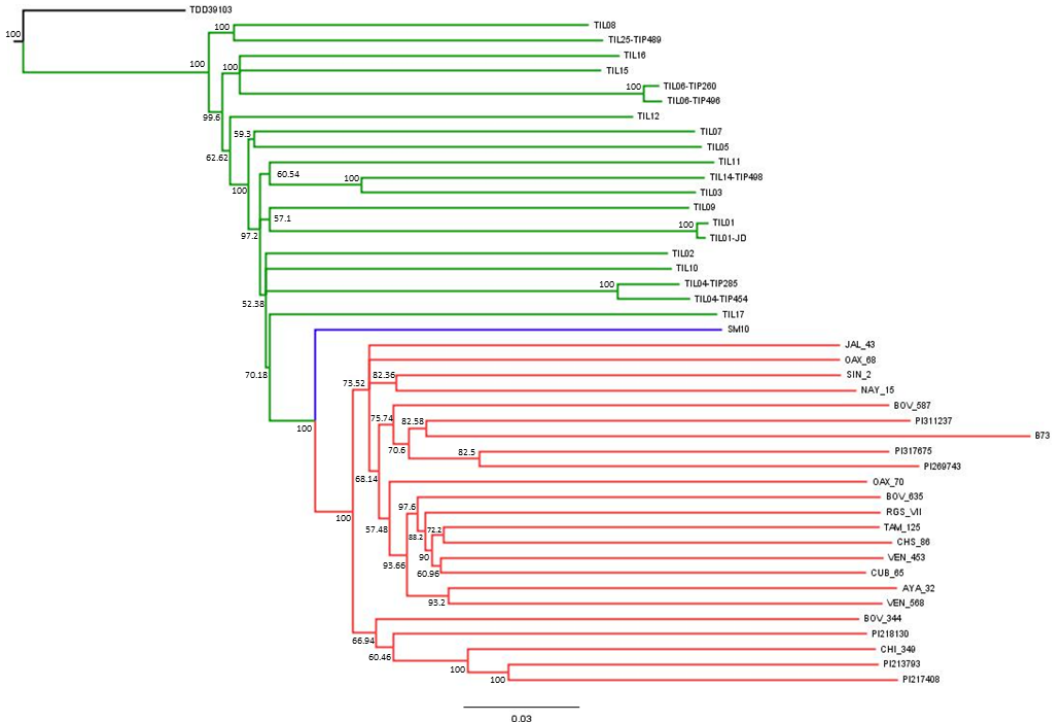

Figure S6. Evolutionary relationships between SM10 ancient maize and its wild or cultivated relatives Maximum likelihood reconstruction from an alignment of 892,033 genome-wide SNPs covering non-repetitive regions of the reference maize genome. SM10 is a maize sample dating 5040-4970 years BP; the teosinte and landrace accessions follow the nomenclature reported in (*20*), and described in Table S5.

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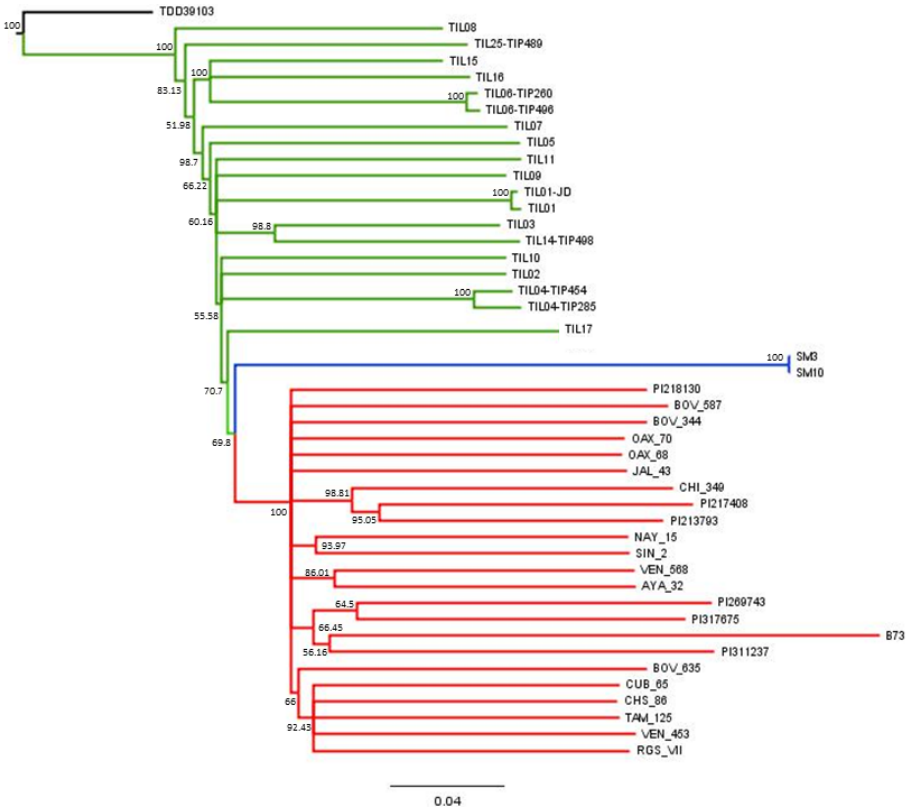

Figure S7. Evolutionary relationships between both SM3 and SM10 ancient maize samples and its wild or cultivated relatives. Maximum likelihood reconstruction from an alignment of 13,079 genome-wide heterozygous SNPs showing at least 10X coverage and corresponding to non-repetitive regions of the reference maize genome. SM3 and SM10 represent two maize samples dating 5300-4970 years BP; the teosinte and landrace accessions follow the nomenclature reported in (*20*), and described in Table S5.

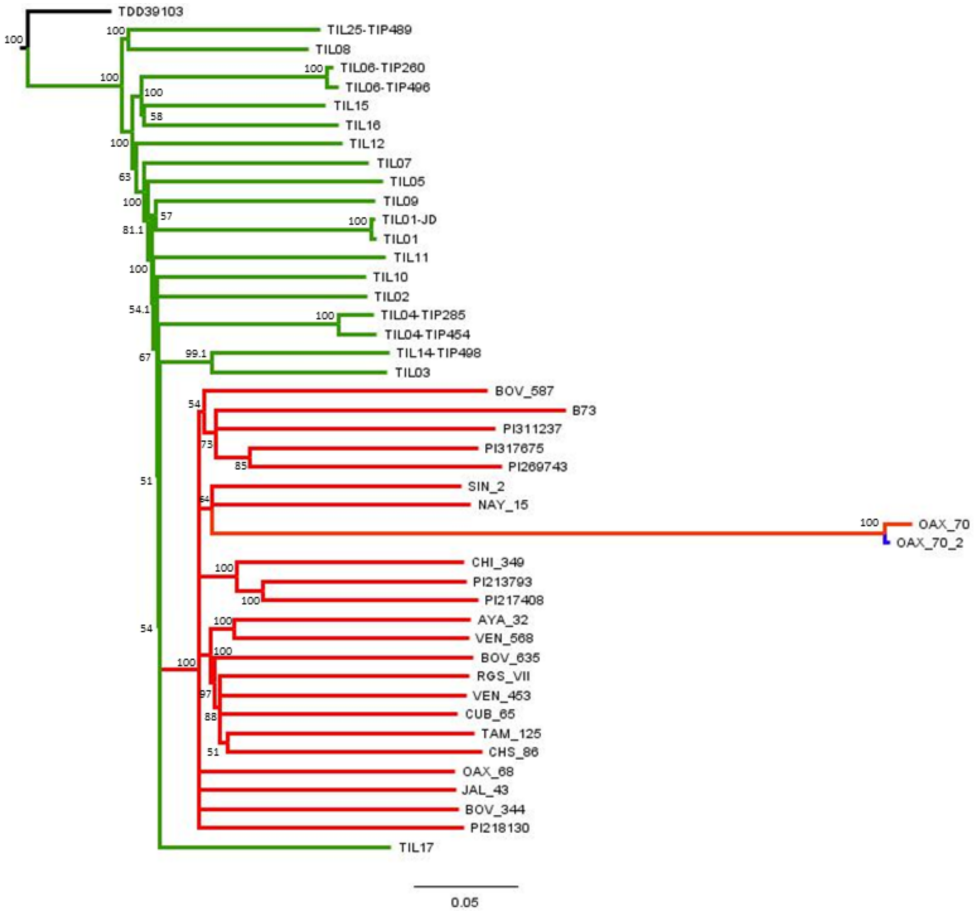

Figure S8. Maximum likelihood topology based on 1,665,533 SNPs of OAX70 obtained from the same sequence dataset as the one used in HapMap3 (OAX70_2), but independently called with the pipeline used in this study. Although the intra-lineage topology is modified on the basis of the nature of the SNP dataset, both OAX70 samples group adjacently within the landrace lineage; accessions follow the nomenclature reported in (*20*), and described in Table S5.

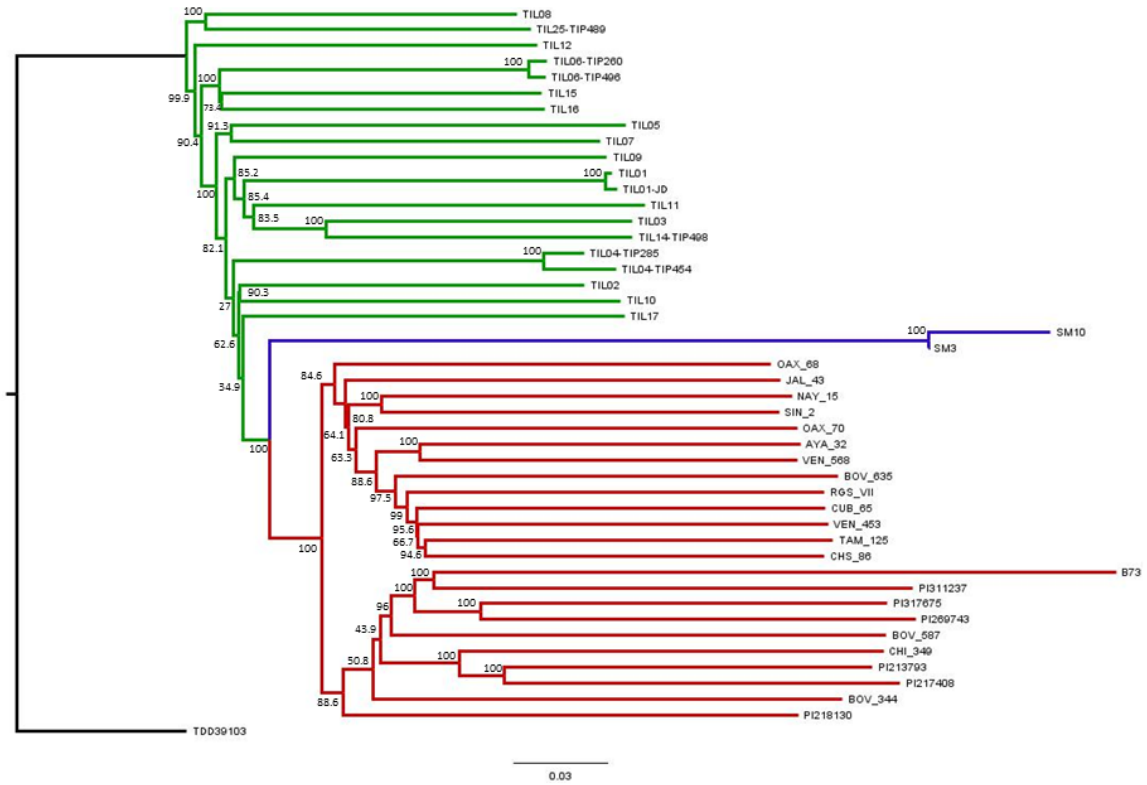

Figure S9. Neighbor-joining tree of ancient (blue) and domesticated maize (red), as well as their wild teosinte relatives (green). A total of 100,540 SNPs shared between SM3, SM10, and selected HapMap3 accessions were concatenated for each genotype. SM3 and SM10 represent two maize samples dating 5300-4970 years BP; the teosinte and landrace accessions follow the nomenclature reported in (*20*), and described in Table S5.

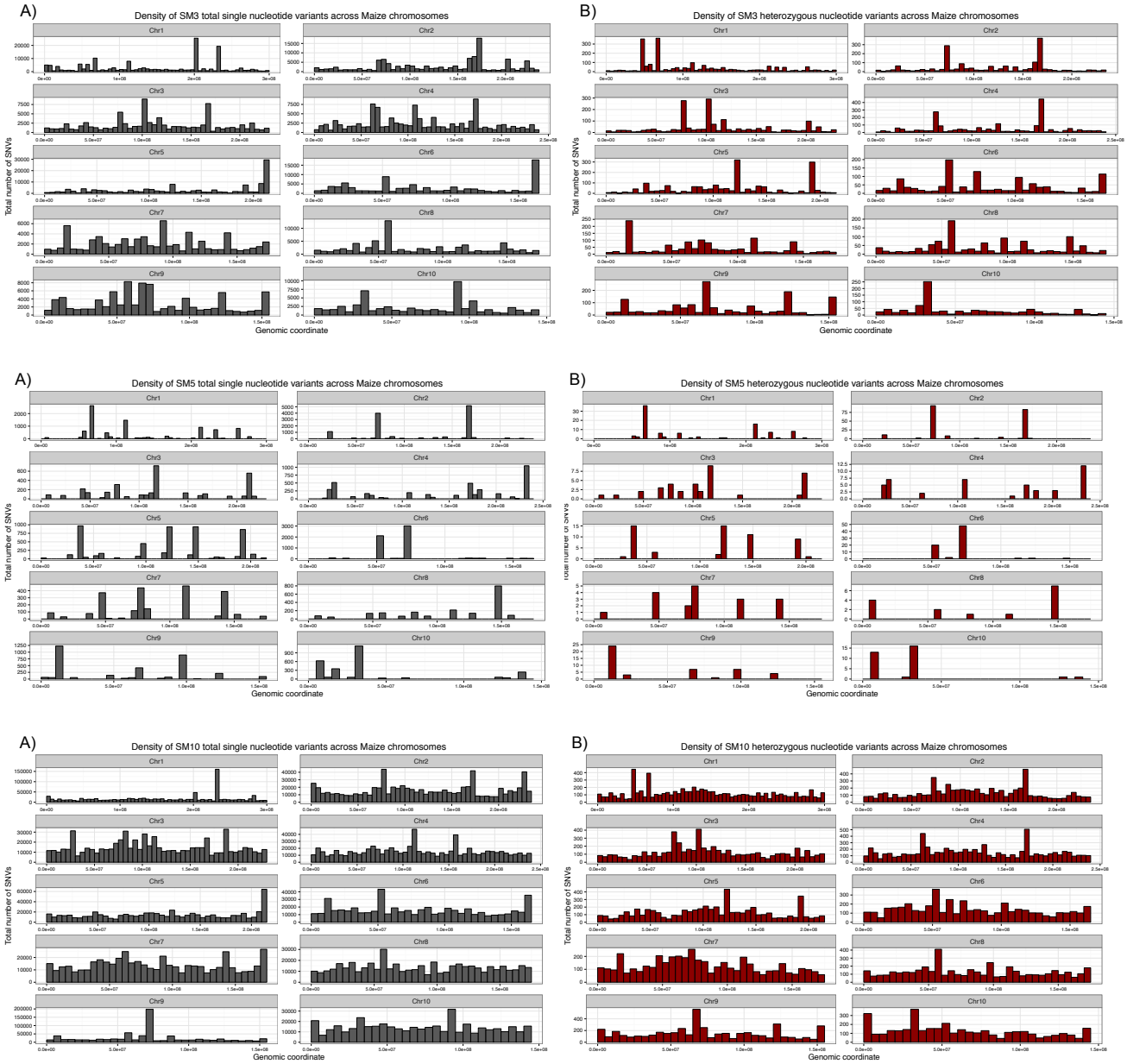

Figure S10. Distribution and density maps of single nucleotide variants having at least 10X coverage for the three ancient maize genotypes SM3, SM5 and SM10. (A) Total number SNVs called in each genotype; it includes both homozygous and heterozygous variants. (B) Only SNVs corresponding to heterozygous variants.

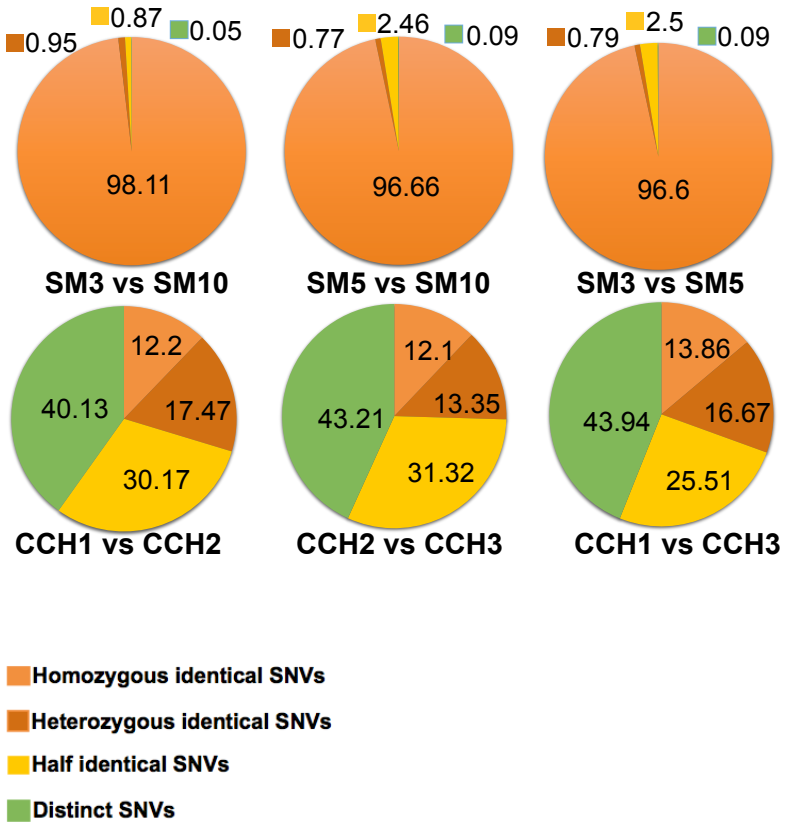

Figure S11. Comparison of single nucleotide polymorphic variants (SNVs) among ancient samples and extant maize. Pairwise comparisons of three ancient samples from San Marcos cave (SM3, SM5, and SM10) as compared to pairwise comparisons of three randomly selected *Cacahuacintle* landrace individuals from an open-pollinated population of 4,500 plants (CCH1, CCH2, and CCH3). All values are given as a percentage of total.

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