SUPPLEMENTARY MATERIALS

Malagasy genetic ancestry comes from an historical Malay trading post in Southeast Borneo.

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Supplementary Figure S1 - Locations of the sampled groups in Borneo island in Indonesia. The map was generated using Global Mapper v.15 software. (http://www.bluemarblegeo.com/products/global-mapper.php)



Supplementary Figure S2 - ADMIXTURE plot from K=2 to K=16 of the low SNP density dataset using ADMIXTURE software (Alexander, et al. 2009). The Banjar and Ngaju populations are identified by the red rectangle, respectively labelled 41 and 42. The studied populations are numerically labelled as follows: 1: Gambian; 2: Mende; 3: Beninese; 4: Yoruba; 5: Afar; 6: Amhara; 7: Tygray; 8: Oromo; 9: Wolayta; 10: Ari-Blacksmith; 11: Ari-Cultivator; 12: Somalian; 13: Sudanese; 14: Anuak; 15: Gumuz; 16: Luhya; 17: South African Bantu; 18: Vezo; 19: Mikea; 20: Temoro; 21: US. European descendant; 22: Onge; 23: Brahmin; 24: Dravidian; 25: Indian from Singapore; 26: Han; 27: Burmese; 28: Vietnamese; 29: Jehai; 30: Bateq; 31: Mendriq; 32: Kintaq; 33: MahMeri; 34: CheWong; 35: Jakun; 36: Temuan; 37: Seletar; 38: Malay; 39: Besemah; 40: Semende; 41: Bidayuh; 42: Banjar; 43: Ngaju; 44: South Kalimantan Dayak; 45: Ma'anyan; 46: Lebbo; 47: Murut; 48: Dusun; 49: Bajo; 50: Central Sumbanese; 51: East Sumbanese; 52: West Sumbanese; 53: Nusa Tenggara; 54: Moluccas; 55: Papua New Guinea Highlander; 56: Philippines Negrito; 57: Filipino; 58: Igorot; 59: Taiwan Aborigenes; 60: Fiji; 61: Polynesia.

	West Africa	East Africa	South Africa Medagasc	European	South Asia	East Asia	Mainland Southeast Asia		Island Southeast Asia + Taiwan Aborigines	i Ocea
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Supplementary File S3 - Cross-validation plot generated from the ADMIXTURE analysis (Alexander et al. 2009) from K=2 to K=18 on the low density SNP dataset from 10 iterations. It shows that K=16 has the lowest median CV value thereby representing the strongly supported ADMIXTURE plot on the analysis.



Supplementary Figure S4 -TreeMix analysis on the low density dataset with five migration nodes (99% variability) (Pickrell and Pritchard 2012). The arrows indicate the direction of the gene flow and their colors its intensity. A strong gene flow is identified from a node clustering Southeast Asian populations into the three Malagasy populations.



Supplementary figure S5 - Ancestry-specific Principal Component Analysis based on masked SNPs from individuals of the high density dataset obtained after PCAdmix analysis (Brisbin, et al. 2012) and plot with EIGENSOFT v6.0.1 (Patterson, et al. 2006).



Supplementary Figure S6 - Shared Identity-By-Descent fragments between pairs of individuals in the high density dataset, filtering for different thresholds of shared IBD fragments (from IBD > 10cM to IBD >90cM), calculated with RefinedIBD (Browning and Browning 2007; Browning and Browning 2013). Populations are represented by a blue circle which diameter is proportional to the number of individuals (from n=4 to n=31). Shared IBD fragments between each pair of individuals are represented by a black line with Cytoscape (Shannon, et al. 2003).



Supplementary Figure S7 – Coancestry heat map (A) and pairwise coincidence matrix (B) of the individuals of the high SNP density dataset generated by fineSTRUCTURE (Lawson, et al. 2012). The color scale in (A) indicates the chunk counts between each pair of individuals calculated by Chromopainter. The color scale in (B) indicates the pairwise coincidence between each pair of individuals. Nodes are collapsed below 60% probability. For convenience, close labels are merged (e.g., Kenya-Luhya 1/2 refers to population sub-structure in two groups of the Kenya-Luhya).





Supplementary Table S1 - Table of the populations included in both the low and high density SNP datasets used in the study.

Population	Country	N (LDD)	N (HDD)	Reference
Yoruba	Nigeria	206	25	(International HapMap, et al. 2010)
Mende	Senegal	85	-	(International HapMap et al. 2010)
Gambian	Gambia	115	-	(International HapMap et al. 2010)
European	USA	99	25	(International HapMap et al. 2010)
Han	China	103	25	(International HapMap et al. 2010)
Luhya	Kenya	97	25	(International HapMap et al. 2010)
Beninese	Benin	24	-	Fortes-Lima, personal communication
Afar	Ethiopia	10	-	(Pagani, et al. 2012)
Tygray	Ethiopia	20	-	(Pagani et al. 2012)
Amhara	Ethiopia	24	-	(Pagani et al. 2012)
Wolayta	Ethiopia	6	-	(Pagani et al. 2012)
Oromo	Ethiopia	21	-	(Pagani et al. 2012)
Ari-Cutivator	Ethiopia	21	-	(Pagani et al. 2012)
Ari-Blacksmith	Ethiopia	14	-	(Pagani et al. 2012)
Gumuz	Ethiopia	15	-	(Pagani et al. 2012)
Anuak	Ethiopia	22	-	(Pagani et al. 2012)
Sudanese	Sudan	21	-	(Pagani et al. 2012)
Somalian	Somalia	23	23	(Pagani et al. 2012)
Bantu	South Africa	94	25	(May, et al. 2013)
Mikea	Malagasy	18	18	(Pierron, et al. 2014)
Temoro	Malagasy	24	24	(Pierron et al. 2014)
Vezo	Malagasy	24	24	(Pierron et al. 2014)
Lebbo	Indonesia (Borneo)	15	15	(Pierron et al. 2014)
Bajo	Indonesia (Sulawesi)	31	31	(Pierron et al. 2014)
Indian	Singapore	83	-	(Teo, et al. 2009)
Malay	Singapore	89	25	(Teo et al. 2009)
Jehai	Malaysia	20	-	(Aghakhanian, et al. 2015)
Bateq	Malaysia	9	-	(Aghakhanian et al. 2015)
Mendriq	Malaysia	12	-	(Aghakhanian et al. 2015)
Kintaq	Malaysia	13	-	(Aghakhanian et al. 2015)
MahMeri	Malaysia	17	-	(Aghakhanian et al. 2015)
CheWong	Malaysia	6	-	(Aghakhanian et al. 2015)
Jakun	Malaysia	9	-	(Aghakhanian et al. 2015)
Temuan	Malaysia	12	-	(Aghakhanian et al. 2015)
Seletar	Malaysia	13	-	(Aghakhanian et al. 2015)
Onge	Andaman	10	-	(Reich, et al. 2011)

Dravidian	India	12	-	(Reich et al. 2011)
Besemah	Indonesia (Sumatra)	8	-	(Reich et al. 2011)
Semende	Indonesia (Sumatra)	9	-	(Reich et al. 2011)
Bidayuh	Malaysia (Borneo)	10	-	(Reich et al. 2011)
Nusa Tenggara	Indonesia	10	-	(Reich et al. 2011)
Moluccas	Indonesia	10	-	(Reich et al. 2011)
PNG Highlander	Papua New Guinea	24	-	(Reich et al. 2011)
Filipino**	Philippines	16	-	(Reich et al. 2011)
Philippines Negrito	Philippines	11	-	(Reich et al. 2011)
Taiwanese Aborigines	Taiwan	12	-	(Reich et al. 2011)
Fiji	Fiji	25	-	(Reich et al. 2011)
Polynesian	Polynesia	19	-	(Reich et al. 2011)
Sumbanese*	Indonesia (Sumba)	180	25	(Cox, et al. forthcoming)
Brahmin	India	47	25	(Mörseburg, et al. forthcoming)
Burmese	Myanmar	20	20	(Mörseburg et al. forthcoming)
Vietnamese	Vietnam	20	20	(Mörseburg et al. forthcoming)
Igorot	Philippines	21	21	(Mörseburg et al. forthcoming)
Filipino**	Philippines	16	16	(Mörseburg et al. forthcoming)
Dusun	Malaysia (Borneo)	17	17	(Mörseburg et al. forthcoming)
Murut	Malaysia (Borneo)	17	17	(Mörseburg et al. forthcoming)
Ma'anyan	Indonesia (Borneo)	162	25	(Kusuma, et al. 2016)
SK.Dayak	Indonesia (Borneo)	40	25	(Kusuma et al. 2016)
Ngaju	Indonesia (Borneo)	25	25	this study
Banjar	Indonesia (Borneo)	16	16	this study

Note: LDD: Low Density of SNP Dataset (40,272 SNPs); HDD: High Density of SNP Dataset (374,189 SNPs). *: Sumbanese of the LDD were sub-grouped in 3 locations of sampling for some analyses: West (W-Sumba), Central (C-Sumba), East (E-Sumba).; **: For some analyses Filipino individuals from (Reich et al. 2011) and (Mörseburg et al. forthcoming) were pooled.

Supplementary Table S2 - Results of *f3*-statistics showing the Z-score <-2 obtained for each combination on populations in the high density dataset to test for admixture. Only the 15 lowest Z-scores are shown for each tested group.

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Bajo S Adricen Rahm Univeral Uprof Additional Additional Males M	Bajo	Luhya	Igorot	-0,00074	0,00015	-4,83578	Mikea	SK-Dayak	Yoruba	-0,00995	0,00010	-100,59000
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Baba Ethionarillan Baya Somulian Baya Somulian Baya Somulian Baya Somulian Baya Control Points Poi	Bajo	Yoruba	Igorot	-0,00073	0,00015	-4,70864	Mikea	Ngaju	Yoruba	-0,00985	0,00010	-99,50600
Baja Somalian gene gene den Mare Mare Mare Mare <t< td=""><td>Bajo</td><td>Eth-Somalian</td><td>Igorot</td><td>-0,00064</td><td>0,00015</td><td>-4,20585</td><td>Mikea</td><td>Yoruba</td><td>Maanyan</td><td>-0,01003</td><td>0,00010</td><td>-99,44410</td></t<>	Bajo	Eth-Somalian	Igorot	-0,00064	0,00015	-4,20585	Mikea	Yoruba	Maanyan	-0,01003	0,00010	-99,44410
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Banjar CHU Maanyan Luhya 0.0009 8.65876 Nyaju S-African, Bantu Igorot 0.0002 0.0007 2.6818 Banjar CU Murut 0.00061 0.00009 8.6599 Nyaju S-African, Bantu Maanyan 0.00007 2.5086 Burmese Cyan 0.01836 0.00007 4.36050 Nyaju Maanyan Uuhya 0.00017 2.32433 Burmese Vietnamese CEU 0.0011 0.00007 4.34055 Nyaju Yoruba Maanyan 0.00011 0.00007 4.34355 Burmese CHB Somalian 0.0228 0.00007 4.724870 Nyaju Maanyan 0.00011 0.00007 4.74116 Burmese Vietnamese Ensomalian 0.0228 0.00007 45.71400 Sk-Dayak Maanyan 0.00021 0.00003 4.74116 Burmese Vietnamese Ensomalian 0.00260 0.0007 45.71400 Sk-Dayak Maanyan 0.00025 0.0003	Banjar	S-African Bantu	Maanyan	-0.00073	0,00008	-8 92003	Ngaju	Yoruba	laorot	-0.00029	0.00010	-2 85123
Inter-gain Langiar Learning Database	Banjar	Maanyan	Lubya	-0.00069	0,00008	-8 65876	Ngaju	S-African Bantu	laorot	-0.00028	0.00010	-2 68118
Burmese Gyan CHB 0.0025 0.0006 5.0.007 2.50566 Burmese Gyan 0.0032 0.0006 51.6509 Ngju Marina, Bantu Maanyan 0.0007 0.24396 Burmese Vietnamese CEU 0.0007 43.6035 Ngju Yuruba Maanyan 0.0007 7.42496 Burmese Vietnamese CEU 0.0013 0.0007 41.6630 SK Dayak Maanyan 0.0001 0.00007 7.42496 Burmese CHB Somalian 0.0028 0.00007 40.6390 SK Dayak Maanyan 0.00001 0.00007 7.42457 Burmese CHB Somalian 0.0026 0.00007 36.73700 SK Dayak Maanyan 0.00021 0.00007 7.27878 Burmese Gyan Murut 0.00260 0.00007 36.73700 SK Dayak Maanyan 0.00021 0.00001 7.02357 Burmese Gyan Igorot 0.0026 0.00007 36.71705 <td< td=""><td>Banjar</td><td>CELL</td><td>Murut</td><td>-0.00081</td><td>0,00000</td><td>-8 63500</td><td>Ngaju</td><td>CELL</td><td>Igorot</td><td>-0.00026</td><td>0.00010</td><td>-2,60884</td></td<>	Banjar	CELL	Murut	-0.00081	0,00000	-8 63500	Ngaju	CELL	Igorot	-0.00026	0.00010	-2,60884
Burmese Vietnamese Gyan 0.0022 0.00007 43,0350 Ngju Maaryan Lubya 0.00007 2,23966 Burmese CEU CHB 0.00017 43,0350 Ngju Yoruba Maaryan 0.00017 0.00007 2,23433 Burmese CHB Somalian 0.00028 0.00007 41,26430 KNaya Burmese 0.00011 0.00007 2,23433 Burmese CHB Somalian 0.00280 0.00007 41,56430 Sch Dayak Maaryan Burmese 0.00014 7,9255 Burmese Gyan Murut 0.0026 0.00007 36,73700 Sch Dayak Maaryan Jumas 0.00001 0.00007 7,41106 Burmese Gyan Murut 0.00270 0.00007 36,71400 Sch Dayak Maaryan 0.00023 0.00007 7,03378 Burmese CHB Luhya 0.00270 0.00007 35,15690 Sch Dayak Maaryan 0.00021 0.00007 7,03378	Burmese	Gyan	CHB	-0,00001	0,00007	-56 17750	Ngaju	S-African Bantu	Maanvan	-0,00020	0,00010	-2,00004
Damese CEU Oxocod Oxocod <thoxocod< th=""></thoxocod<>	Burmoso	Viotnamoso	Gyan	0,00323	0,00006	51 65000	Ngaju	Maanyan	Lubya	0,00017	0,00007	2,30300
Burmese CLO ChO	Burmoso	CELL	CUR	-0,00300	0,00000	42 60250	Ngaju	Voruba	Maanyan	-0,00017	0,00007	-2,43700
Burmese CHB -0.0021 0.0000 -1.29493 ruggu Oyan Huiu tu -0.0001 0.0000 -1.39413 Burmese CHB -0.0028 0.0007 -40.63090 SK-Dayak Maaryan Burmese -0.00040 0.00061 -7.42457 Burmese Vietnamese Somalian -0.00260 0.0007 -36.7370 SK-Dayak Maaryan -0.00027 0.0007 -7.2878 Burmese Cyan Murut -0.00260 0.0007 -36.71400 SK-Dayak Maaryan -0.00027 0.00007 -7.2878 Burmese Cyan Igorot -0.00270 0.0007 -35.7156 SK-Dayak Maaryan Bajo -0.00270 0.00067 -5.817450 Burmese S-African_Bantu CHB -0.00271 0.0007 -35.1182 SK-Dayak Maaryan -0.00024 0.00007 -6.8851 Burmese S-African_Bantu CHB -0.00277 0.0007 -33.48620 SK-Dayak Maaryan -0.00024	Burmoso	Vietnemoce	CEU	-0,00310	0,00007	43,00330	Ngaju	Cuan	Murut	-0,00010	0,00007	-2,32433
Burrnese Chris Santalani -0.0228 0.00007 -1.9828 Sk.Dayak Maaryan 0.0004 0.0004 -7.9425 Burrnese Eth-Somalian 0.0025 0.0007 -37.29110 Sk.Dayak Maaryan 0.0004 0.0004 -7.4116 Burrnese Gyan Murut 0.00250 0.0007 -36.7370 Sk.Dayak Maaryan 0.00021 -0.0023 0.00003 -7.0237 Burrnese Cyan Igorot -0.0029 0.0007 -36.7140 Sk.Dayak Maaryan -0.00021 0.00003 -7.0237 Burrnese CHB Luhya -0.00251 0.0007 -35.5195 Sk.Dayak CEU Maaryan -0.00024 0.00004 -5.9014 Burrnese Sk-Arican_Bantu CHB -0.00251 0.0007 -34.3338 Sk-Dayak Gyan Igorot -0.00024 0.00007 -5.9114 Burrnese Sk-Dayak Gyan Maaryan -0.00027 0.00005 -5.20714 Burrnese	Burmese	vietnamese	CEU	-0,00311	0,00007	-42,84930	Ngaju	Gyan	Iviurut	-0,00011	0,00007	-1,43415
Burmese Eth Sumaisain Chub - 0.00228 0.00007 -37,2497 Winanyan -0.00034 0.00004 -7,4345 Burmese Gyan Murut -0.0026 0.0007 -37,2170 SK-Dayak Maanyan -0.0003 0.00004 -7,41106 Burmese Gyan Murut -0.0026 0.0007 -3,7140 SK-Dayak Maanyan -0.00032 0.00004 -7,41106 Burmese Vietnamese Eth Somalian -0.00257 0.0007 -3,51950 SK-Dayak Maanyan -0.00031 0.00005 -7,08378 Burmese CHB Luhya -0.00257 0.0007 -3,43380 SK-Dayak Maanyan -0.00041 0.00005 -5,20714 Burmese SK-Dayak Gyan Igorot -0.00228 0.0006 -3,242450 SK-Dayak Maanyan -0.00024 0.00007 -5,20714 Burmese SK-Dayak Gyan Igorot -0.00228 0.0006 -2,47450 SK-Dayak Maanyan -0.000221 0.00007 <td>Burmese</td> <td>CHB</td> <td>Somalian</td> <td>-0,00280</td> <td>0,00007</td> <td>-41,00030</td> <td>SK-Dayak</td> <td>Quan</td> <td>Burmese</td> <td>-0,00031</td> <td>0,00004</td> <td>-7,90256</td>	Burmese	CHB	Somalian	-0,00280	0,00007	-41,00030	SK-Dayak	Quan	Burmese	-0,00031	0,00004	-7,90256
Burmese Gyan Murut 0.0020 37,2910 Sk.Jajak Mananyan Suthanese 0.00004 7,4710 Burmese Gyan Murut 0.00207 36,71400 Sk.Dajak Maanyan 0.00004 7,27878 Burmese Gyan Igorot 0.00207 36,71400 Sk.Dajak Maanyan Bajo 0.00004 7,27878 Burmese Gyan Igorot 0.0027 0.0007 35,11950 Sk.Dajak Maanyan Bajo 0.00004 7,28377 Burmese Sk/frican_Bartu CHB 0.0021 0.00007 35,11820 Sk.Dajak Maanyan Maanyan CHB 0.00024 5,08104 Burmese Sk/Dajak Gyan 1.00007 33,18420 Sk.Dajak Maanyan CHB 0.00024 5,26021 Burmese Sk/Dajak Maanyan Jgorot 0.00228 0.00007 33,8420 Sk.Dajak Maanyan Murut 0.00021 0.00007 4,9130 Luzon Gyan	Burmese	Eth-Somalian	CHB	-0,00283	0,00007	-40,03090	SK-Dayak	Gyan	iviaariyari	-0,00044	0,00006	-7,43457
Burmese Uvenamese Eth Somalian 0.0026 / 0.0007 -36,7400 Sk-Uayak Maahyan -0.0027 / 0.0004 -7,22878 Burmese Gyan Igorot -0.0027 / 0.0007 -35,7140 Sk-Uayak Maahy-SG Maahy-SG 0.0003 -7,02357 Burmese CHB Luhya -0.0027 -0.0017 -35,7140 Sk-Uayak Maahy-SG 0.00007 -6,0140 Burmese CHB Luhya -0.00257 0.0007 -35,51950 Sk-Dayak CEU Maanyan -0.00024 0.00004 -5,70169 Burmese Sk-Dayak Gyan Honor -0.00227 0.00006 -34,22450 Sk-Dayak Gyan Honor -0.00028 0.00007 -33,8380 K-Dayak Maanyan -0.00028 0.00007 -36,4740 Maanyan -0.00028 0.00007 -5,20714 Luzon Gyan Maanyan -0.00228 0.00007 -23,74760 Sk-Dayak Maanyan Muanyan -0.0027 0.00007 -4,91390 Luzon	Burmese	vietnamese	Somalian	-0,00260	0,00007	-37,29110	SK-Dayak	iviaanyan	Sumbanese	-0,00030	0,00004	-7,41106
Burmese Vietnamese Eth-Somalian 10,00240 0,00007 -36,71400 Sk-Uayak Maaryan -0,00025 0,00003 -7,02375 Burmese Gyan Luhya -0,00270 0,00007 -35,51950 Sk-Dayak CEU Maaryan -0,00025 0,00005 -7,02357 Burmese Sk-African_Bantu CHB -0,0027 0,00007 -35,51950 Sk-Dayak CEU Maaryan -0,00024 0,00004 -5,80104 Burmese Sk-Dayak Cyan 0,00027 -4,0225 Sk-Dayak Ceyn Maaryan -0,00024 0,00005 -5,20714 Burmese Gyan Igorot -0,00228 0,0007 -33,8420 Sk-Dayak Vezo Maaryan -0,00027 0,00007 -5,20714 Luzon Gyan Igorot -0,00228 0,0001 -23,76760 Sk-Dayak Maaryan Murut -0,00034 0,00007 -4,9414 Luzon CEU Igorot -0,00229 0,00010 -22,76760 Sk-Da	Burmese	Gyan	Murut	-0,00267	0,00007	-36,/3/00	SK-Dayak	Vietnamese	Maanyan	-0,00027	0,00004	-7,27878
Burmese Cyan Igrot -0.00240 0.00004 -3.6,48650 SK-Dayak CEU Maanyan -0.00241 0.00007 -6.02851 Burmese SAfrican_Bantu CHB -0.00257 0.0007 -35,51950 SK-Dayak CEU Maanyan -0.00241 0.00007 -5.80104 Burmese SA-frican_Bantu CHB -0.00220 0.0006 -3.4,22450 SK-Dayak Cyan Igorot -0.00021 0.00005 -5,22071 Burmese Gyan Maanyan -0.00220 0.00007 -3.84820 SK-Dayak Vezo Maanyan -0.00210 0.00005 -5,220714 Luzon Gyan Maanyan -0.00223 0.00007 -24,0030 SK-Dayak Maanyan Luhya -0.00034 0.00007 -4,91390 Luzon EU Igorot -0.00227 0.0010 -22,4760 SK-Dayak Sufrican_Bantu Maanyan -0.0049 0.00007 -4,84829 Luzon Luron Lubya Igorot -0.00227	Burmese	vietnamese	Eth-Somalian	-0,00260	0,00007	-36,71400	SK-Dayak	Malay-SG	Maanyan	-0,00023	0,00003	-7,08378
Burmese CHB Luhya -0.00257 0.0007 -35,51950 SK-Dayak CEU Maanyan -0.00041 0.00007 -6,08811 Burmese SAfrican_Bantu CHB -0.00224 0.00007 -34,33380 SK-Dayak Gyan Igorot -0.00027 0.00007 -5,38104 Burmese SK-Dayak Gyan Maanyan -0.00220 0.00007 -34,32380 SK-Dayak Temoro Maanyan -0.00227 0.00007 -5,28602 Burmese Gyan Mgorot -0.00226 0.00008 -26,73450 SK-Dayak Vezo Maanyan -0.0021 0.00007 -4,91390 Luzon Somalian Igorot -0.00227 0.00010 -23,76760 SK-Dayak Maanyan Luhya 0.00014 0.00007 -4,94392 Luzon Eth-Somalian Igorot -0.00227 0.00010 -22,8460 Somalian CEU -0.00448 0.00007 -4,84829 Luzon Veraba Igorot -0.00227 0.00016	Burmese	Gyan	Igorot	-0,00290	0,00008	-36,48650	SK-Dayak	Maanyan	Вајо	-0,00035	0,00005	-7,02357
Burmese S-Arrican_Bantu CHB -0.00224 0.00007 -33,4120 S-K-Dayak Maanyan CHB -0.00024 0.00004 -5,80104 Burmese Sk-Dayak Cyan 0.00027 0.00027 -34,33380 Sk-Dayak Gyan Igorot -0.00028 0.00005 5,32602 Burmese Gyan Igorot -0.00224 0.00007 -33,8420 Sk-Dayak Vezo Maanyan -0.00027 0.00005 5,23714 Luzon Gyan Igorot -0.00228 0.0009 -24,0003 Sk-Dayak Maanyan Murut -0.00034 0.00007 -4,91300 Luzon CEU Igorot -0.00227 0.0010 -22,376760 Sk-Dayak Maanyan Luhya 0.00049 0.00007 -4,91300 Luzon Eth-Somalian Igorot -0.00227 0.0010 -22,8460 Somalian CEU -0.00448 0.00007 -4,43610 Luzon Voruba Igorot -0.00227 0.0001 -22,24460	Burmese	СНВ	Luhya	-0,00257	0,00007	-35,51950	SK-Dayak	CEU	Maanyan	-0,00041	0,00007	-6,08851
Burmese Yoruba CHB -0,00257 0,00007 -34,3330 Sk-Dayak Gyan Igorot -0,00404 0,00004 -5,79169 Burmese Sk-Dayak Gyan Maanyan -0,00223 0,00006 -34,22450 Sk-Dayak Temoro Maanyan -0,00027 0,00005 -5,20714 Luzon Gyan Igorot -0,00228 0,00007 -24,0030 Sk-Dayak Maanyan Murut -0,00021 0,00007 -4,91390 Luzon Somalian Igorot -0,00227 0,00010 -23,76760 Sk-Dayak Maanyan Luhya Igorot -0,00027 -4,84829 Luzon Luhya Igorot -0,00229 0,0010 -22,43660 Somalian CEU Luhya 0,00017 -4,48299 Luzon Yoruba Igorot -0,00229 0,0010 -22,43560 Somalian CEU Luhya -0,00478 0,00010 -47,79240 Luzon Yoruba Igorot -0,00227 0,0001 -2	Burmese	S-African_Bantu	СНВ	-0,00261	0,00007	-35,41820	SK-Dayak	Maanyan	СНВ	-0,00024	0,00004	-5,80104
Burmese Sk.Dayak Gyan -0.0022 0.00006 -34.22450 Sk.Dayak Temoro Maanyan -0.00208 0.00005 -5.32602 Burmese Gyan Igorot -0.00233 0.00007 -33.86420 Sk.Dayak Vezo Maanyan -0.00207 0.00005 -5.220714 Luzon Gyan Igorot -0.00228 0.00007 -24,0030 Sk.Dayak Maanyan Murut -0.00207 0.00004 -5.04424 Luzon Somalian Igorot -0.00233 0.0010 -23,76760 Sk.Dayak Maanyan Luhya Igorot -0.00249 0.0010 -43,4829 Luzon Luhya Igorot -0.00227 0.0010 -22,4868 Somalian S-African_Bantu Maanyan -0.0014 0.00007 -4,4829 Luzon Vezo Igorot -0.00227 0.0010 -22,4868 Somalian S-African_Bantu CEU -0.00443 0.00010 -42,1930 Luzon Vezo Igorot -0.00160 </td <td>Burmese</td> <td>Yoruba</td> <td>СНВ</td> <td>-0,00257</td> <td>0,00007</td> <td>-34,33380</td> <td>SK-Dayak</td> <td>Gyan</td> <td>Igorot</td> <td>-0,00049</td> <td>0,00008</td> <td>-5,79169</td>	Burmese	Yoruba	СНВ	-0,00257	0,00007	-34,33380	SK-Dayak	Gyan	Igorot	-0,00049	0,00008	-5,79169
Burnese Gyan Maanyan -0.0023 0.00007 -33.86420 SK-Dayak Vezo Maanyan -0.0022 0.00005 -5,20714 Luzon Gyan Igorot -0.00226 0.00008 -26,73450 SK-Dayak Maanyan Murut -0.00024 0.00007 -4,91390 Luzon CEU Igorot -0.00228 0.00010 -23,76760 SK-Dayak Maanyan Luhya -0.00024 0.00007 -4,90414 Luzon CEU Igorot -0.00227 0.0011 -23,57676 SK-Dayak S-African_Bantu Maanyan -0.00049 0.00007 -4,84829 Luzon Luhya Igorot -0.00227 0.0011 -22,8460 Somalian CEU Luhya -0.00448 0.00007 -4,41920 Luzon Yoruba Igorot -0.00161 0.00008 -22,8460 Somalian S-African_Bantu CEU -0.00448 0.00007 -4,41920 Luzon Mikea Igorot -0.00160 0.00008	Burmese	SK-Dayak	Gyan	-0,00220	0,00006	-34,22450	SK-Dayak	Temoro	Maanyan	-0,00028	0,00005	-5,32602
Luzon Gyan Igorot -0,00226 0,00028 -26,73450 SK-Dayak Maanyan Murut -0,0021 0,00004 -5,04424 Luzon Somalian Igorot -0,00238 0,00009 -24,00030 SK-Dayak Maanyan Luhya -0,00034 0,00007 -4,91390 Luzon CEU Igorot -0,00227 0,00010 -23,76760 SK-Dayak SA-African_Bantu Maanyan -0,00034 0,00007 -4,84829 Luzon Luhya Igorot -0,00229 0,0010 -22,86680 Somalian Yoruba CEU -0,00478 0,0001 -47,79240 Luzon Yoruba Igorot -0,00227 0,0010 -22,4360 Somalian S-African_Bantu CEU -0,00448 0,0001 -44,19020 Luzon Vezo Igorot -0,00160 0,0008 -20,85780 Somalian Gyan Luhya -0,00237 0,0009 -21,1020 Luzon Mikea Igorot -0,00160 0,00006	Burmese	Gyan	Maanyan	-0,00233	0,00007	-33,86420	SK-Dayak	Vezo	Maanyan	-0,00027	0,00005	-5,20714
Luzon Somalian Igorot -0,00228 0,0009 -24,0030 SK-Dayak Maanyan Luhya -0,0034 0,0007 -4,91390 Luzon CEU Igorot -0,00237 0,0010 -23,7670 SK-Dayak Luhya Igorot -0,0049 0,0001 -4,90414 Luzon Eth-Somalian Igorot -0,00227 0,0010 -22,86680 Somalian Yoruba CEU -0,00478 0,0001 -4,84829 Luzon Yoruba Igorot -0,00227 0,0010 -22,86680 Somalian CEU -0,00448 0,0009 -4,743610 Luzon S-African_Bantu Igorot -0,0021 0,0010 -22,4360 Somalian S-African_Bantu CEU -0,0043 0,0010 -4,1920 Luzon Vezo Igorot -0,0016 0,0008 -20,39340 Somalian Gyan Yoruba -0,00237 0,0009 -21,1950 Luzon Mikea Igorot -0,00112 0,0006 12,37340 <t< td=""><td>Luzon</td><td>Gyan</td><td>Igorot</td><td>-0,00226</td><td>0,00008</td><td>-26,73450</td><td>SK-Dayak</td><td>Maanyan</td><td>Murut</td><td>-0,00021</td><td>0,00004</td><td>-5,04424</td></t<>	Luzon	Gyan	Igorot	-0,00226	0,00008	-26,73450	SK-Dayak	Maanyan	Murut	-0,00021	0,00004	-5,04424
Luzon CEU Igorot -0,00233 0,0010 -23,76760 SK-Dayak Luhya Igorot -0,0014 0,00010 -4,90414 Luzon Eth-Somalian Igorot -0,00227 0,0010 -23,51470 SK-Dayak S-African_Bantu Maanyan -0,0034 0,00034 0,00007 -4,8829 Luzon Yoruba Igorot -0,00229 0,0010 -22,83680 Somalian CEU Luhya 0,0014 0,00009 -47,43610 Luzon S-African_Bantu Igorot -0,00227 0,0010 -22,23460 Somalian CEU Luhya -0,0023 0,0001 -22,24360 Luzon Vezo Igorot -0,00161 0,0028 -20,8780 Somalian Gyan Luhya -0,00237 0,0009 -25,10260 Luzon Mikea Igorot -0,00160 0,0008 -20,8780 Somalian S-African_Bantu Gyan -0,00235 0,0009 -24,97390 Luzon Mikea Igorot -0,00160	Luzon	Somalian	Igorot	-0,00228	0,00009	-24,00030	SK-Dayak	Maanyan	Luhya	-0,00034	0,00007	-4,91390
Luzon Eth-Somalian Igorot -0,0027 0,0010 -23,51470 SK-Dayak S-African_Bantu Maanyan -0,0034 0,0007 -4,84829 Luzon Luhya Igorot -0,00229 0,0010 -22,8660 Somalian Yoruba CEU -0,00478 0,0000 -47,79240 Luzon S-African_Bantu Igorot -0,00227 0,0010 -22,24460 Somalian CEU Luhya -0,00443 0,00009 -27,13610 Luzon Vezo Igorot -0,0016 0,0008 -20,85780 Somalian Gyan Luhya -0,0027 0,0009 -21,0150 Luzon Mikea Igorot -0,0016 0,0008 -20,39340 Somalian Gyan Yoruba -0,00237 0,0009 -21,8150 Luzon Temoro Igorot -0,00173 0,0006 -12,3740 Somalian Surmese Luhya -0,00034 0,0011 -2,98567 Luzon Igorot Sumbanese -0,0025 0,0001	Luzon	CEU	Igorot	-0,00233	0,00010	-23,76760	SK-Dayak	Luhya	Igorot	-0,00049	0,00010	-4,90414
Luzon Luhya Igorot -0,00229 0,00010 -22,86680 Somalian Yoruba CEU -0,00478 0,00010 -47,79240 Luzon Yoruba Igorot -0,00227 0,00010 -22,43360 Somalian CEU Luhya -0,00448 0,00009 -47,43610 Luzon S-African_Bantu Igorot -0,0027 0,0010 -22,24460 Somalian S-African_Bantu CEU -0,00438 0,0009 -24,97390 Luzon Mikea Igorot -0,0166 0,0008 -20,18860 Somalian S-African_Bantu Gyan -0,0023 0,0009 -24,97390 Luzon Temoro Igorot -0,00112 0,0006 -18,2300 Somalian S-African_Bantu Gyan -0,0023 0,0001 -3,47382 Luzon Igorot Sumbanese 0,00073 0,0006 -12,4710 Somalian S-African_Bantu Gyan -0,0034 0,0011 -2,98567 Luzon Igorot Sumbanese Igorot	Luzon	Eth-Somalian	Igorot	-0,00227	0,00010	-23,51470	SK-Dayak	S-African_Bantu	Maanyan	-0,00034	0,00007	-4,84829
Luzon Yoruba Igorot -0,00229 0,00010 -22,43360 Somalian CEU Luhya -0,00448 0,0009 -47,43610 Luzon S-African_Bantu Igorot -0,00227 0,00010 -22,24460 Somalian S-African_Bantu CEU -0,00443 0,00009 -44,19020 Luzon Wezo Igorot -0,0166 0,0008 -20,39340 Somalian Gyan Yoruba -0,00237 0,0009 -24,97390 Luzon Mikea Igorot -0,0116 0,0008 -20,18860 Somalian S-African_Bantu Gyan -0,00205 0,0009 -24,97390 Luzon Burmese Igorot -0,0112 0,0006 -12,37340 Somalian Burmese Luhya -0,0034 0,0011 -2,98567 Luzon Malay-SG Igorot -0,00059 0,0006 -7,76522 Somalian CHB Luhya -0,00045 0,0011 -5,87579 Luzon CEU Burmese Igorot -0,00234	Luzon	Luhya	Igorot	-0,00229	0,00010	-22,86680	Somalian	Yoruba	CEU	-0,00478	0,00010	-47,79240
Luzon S-African_Bantu Igorot -0,00227 0,00010 -22,24400 Somalian S-African_Bantu CEU -0,00443 0,0010 -44,19020 Luzon Vezo Igorot -0,00161 0,0008 -20,85780 Somalian Gyan Luhya -0,0021 0,0009 -25,10260 Luzon Mikea Igorot -0,00166 0,0008 -20,39340 Somalian Gyan Yoruba -0,0025 0,0009 -24,97390 Luzon Temoro Igorot -0,00170 0,00006 -18,23300 Somalian Burmese Luhya -0,0036 0,0011 -3,47382 Luzon Igorot Sumbanese -0,0073 0,0006 -12,37340 Somalian Yoruba Burmese -0,0034 0,0011 -2,98567 Luzon Malay-SG Igorot -0,00059 0,0006 -7,76522 Sumbanese Luhya Igorot -0,00045 0,0011 -5,85895 Gyan CEU Burmese Igorot -0,00235	Luzon	Yoruba	Igorot	-0,00229	0,00010	-22,43360	Somalian	CEU	Luhya	-0,00448	0,00009	-47,43610
Luzon Vezo Igorot -0,0161 0,0008 -20,85780 Somalian Gyan Luhya -0,00221 0,0009 -25,10260 Luzon Mikea Igorot -0,0166 0,0008 -20,39340 Somalian Gyan Yoruba -0,00237 0,0009 -24,97390 Luzon Temoro Igorot -0,0112 0,0006 -18,23300 Somalian Burmese Luhya -0,0036 0,0010 -3,47382 Luzon Igorot Sumbanese -0,00173 0,0006 -12,37340 Somalian Burmese Luhya -0,0013 0,0011 -2,98567 Luzon Malay-SG Igorot -0,0059 0,0006 -12,16120 Somalian CHB Luhya -0,0013 0,0011 -1,19885 Luzon CHB Igorot -0,00059 0,0006 -7,76522 Sumbanese Luhya Igorot -0,00055 0,0011 -5,85895 Gyan CEU Burmese -0,00235 0,00008 -28,72070	Luzon	S-African_Bantu	Igorot	-0,00227	0,00010	-22,24460	Somalian	S-African_Bantu	CEU	-0,00443	0,00010	-44,19020
Luzon Mikea Igorot -0,0166 0,0008 -20,39340 Somalian Gyan Yoruba -0,0237 0,0009 -24,97390 Luzon Temoro Igorot -0,0160 0,0008 -20,18860 Somalian S-African_Bantu Gyan -0,0025 0,0009 -21,81550 Luzon Burmese Igorot -0,00112 0,0006 -18,23300 Somalian Burmese Luhya -0,0036 0,0011 -3,47382 Luzon Igorot Sumbanese -0,00073 0,0006 -12,17340 Somalian CHB Luhya -0,0013 0,0011 -1,19885 Luzon CHB Igorot -0,00059 0,0006 -7,76522 Sumbanese Luhya Igorot -0,00056 0,0011 -5,87579 Luzon Vietnamese Igorot -0,00236 0,0008 -30,74300 Sumbanese Yoruba Igorot -0,00056 0,0011 -5,88895 Gyan CEU Burmese -0,00236 0,0009 -2	Luzon	Vezo	Igorot	-0,00161	0,00008	-20,85780	Somalian	Gyan	Luhya	-0,00221	0,00009	-25,10260
Luzon Temoro Igorot -0,0160 0,0008 -20,18860 Somalian S-African_Bantu Gyan -0,0205 0,0009 -21,81550 Luzon Burmese Igorot -0,00112 0,0006 -18,23300 Somalian Burmese Luhya -0,0036 0,0010 -3,47382 Luzon Igorot Sumbanese -0,00073 0,0006 -12,37340 Somalian Yoruba Burmese -0,00034 0,0011 -2,98567 Luzon Malay-SG Igorot -0,00059 0,0006 -9,63134 Sumbanese Luhya Igorot -0,00055 0,0011 -5,87579 Luzon Vietnamese Igorot -0,0023 0,00008 -30,74300 Sumbanese S-African_Bantu Igorot -0,00055 0,0011 -5,88757 Gyan CEU Burmese -0,00235 0,0008 -30,74300 Sumbanese Yoruba Igorot -0,00045 0,0011 -5,88486 Gyan CEU Burmese -0,00235 0,00	Luzon	Mikea	Igorot	-0,00166	0,00008	-20,39340	Somalian	Gyan	Yoruba	-0,00237	0,00009	-24,97390
Luzon Burmese Igorot -0,0112 0,0006 -18,23300 Somalian Burmese Luhya -0,0036 0,0010 -3,47382 Luzon Igorot Sumbanese -0,0073 0,0006 -12,37340 Somalian Yoruba Burmese -0,0034 0,0011 -2,98567 Luzon Malay-SG Igorot -0,00059 0,0006 -12,16120 Somalian CHB Luhya -0,00056 0,0011 -1,19885 Luzon CHB Igorot -0,0046 0,0006 -7,76522 Sumbanese Luhya Igorot -0,0065 0,0011 -5,87579 Luzon Vietnamese Igorot -0,00236 0,0008 -30,74300 Sumbanese Surbanese S-African_Bantu Igorot -0,00065 0,0011 -5,85895 Gyan CEU Burmese -0,00235 0,0009 -28,7207 Sumbanese Eth-Somalian Igorot -0,00047 0,0010 -4,43370 Gyan CEU Sumbanese -0,00242	Luzon	Temoro	Igorot	-0,00160	0,00008	-20,18860	Somalian	S-African_Bantu	Gyan	-0,00205	0,00009	-21,81550
Luzon Igorot Sumbanese -0,0073 0,0006 -12,37340 Somalian Yoruba Burnese -0,0034 0,0011 -2,98567 Luzon Malay-SG Igorot -0,00069 0,0006 -12,16120 Somalian CHB Luhya -0,00013 0,0011 -1,19885 Luzon CHB Igorot -0,00059 0,0006 -9,63134 Sumbanese Luhya Igorot -0,0005 0,0011 -5,87579 Luzon Vietnamese Igorot -0,0014 0,00006 -7,76522 Sumbanese S-African_Bantu Igorot -0,00055 0,0011 -5,87579 Gyan CEU Burnese -0,00235 0,0008 -30,74300 Sumbanese Yoruba Igorot -0,00055 0,0011 -5,8895 Gyan Malay-SG CEU -0,00235 0,0009 -28,18800 Sumbanese Eth-Somalian Igorot -0,00045 0,0010 -4,34370 Gyan Ngaju CEU -0,00242 0,0009	Luzon	Burmese	Igorot	-0,00112	0,00006	-18,23300	Somalian	Burmese	Luhya	-0,00036	0,00010	-3,47382
Luzon Malay-SG Igorot -0,00069 0,00060 -12,16120 Somalian CHB Luhya -0,00013 0,0011 -1,19885 Luzon CHB Igorot -0,00059 0,0006 -9,63134 Sumbanese Luhya Igorot -0,00065 0,0011 -5,87579 Luzon Vietnamese Igorot -0,00234 0,0008 -30,74502 Sumbanese S-African_Bantu Igorot -0,00065 0,0011 -5,85895 Gyan CEU Burmese -0,00235 0,0008 -30,74300 Sumbanese Yoruba Igorot -0,00045 0,0011 -5,85895 Gyan Malay-SG CEU -0,00235 0,0008 -28,72070 Sumbanese Eth-Somalian Igorot -0,00047 0,0010 -4,53064 Gyan CEU Sumbanese -0,00242 0,0009 -27,7990 Sumbanese Gyan Igorot -0,00012 0,00010 -4,34370 Gyan Ngaju CEU -0,00242 0,0009	Luzon	Igorot	Sumbanese	-0,00073	0,00006	-12,37340	Somalian	Yoruba	Burmese	-0,00034	0,00011	-2,98567
Luzon CHB Igorot -0,0059 0,0006 -9,63134 Sumbanese Luhya Igorot -0,00065 0,0011 -5,87579 Luzon Vietnamese Igorot -0,0046 0,0006 -7,76522 Sumbanese S-African_Bantu Igorot -0,00065 0,0011 -5,85895 Gyan CEU Burmese -0,00235 0,0008 -30,74300 Sumbanese Yoruba Igorot -0,00065 0,0011 -5,85895 Gyan Malay-SG CEU -0,00235 0,0008 -28,72070 Sumbanese Eth-Somalian Igorot -0,00045 0,0010 -4,53064 Gyan CEU Sumbanese -0,00242 0,0009 -28,18800 Sumbanese Somalian Igorot -0,00245 0,0010 -4,34370 Gyan Ngaju CEU -0,00242 0,0009 -27,09300 Sumbanese Gyan Igorot -0,00212 0,00019 -2,35079 Gyan Sk-Dayak CEU -0,00242 0,0009	Luzon	Malay-SG	Igorot	-0,00069	0,00006	-12,16120	Somalian	СНВ	Luhya	-0,00013	0,00011	-1,19885
Luzon Vietnamese Igorot -0,0046 0,0006 -7,76522 Sumbanese S-African_Bantu Igorot -0,0005 0,0011 -5,85895 Gyan CEU Burmese -0,00235 0,0008 -30,74300 Sumbanese Yoruba Igorot -0,00055 0,0011 -5,85895 Gyan Malay-SG CEU -0,00235 0,0009 -28,17207 Sumbanese Eth-Somalian Igorot -0,00045 0,0010 -4,53064 Gyan CEU Sumbanese -0,00240 0,0009 -28,18800 Sumbanese Somalian Igorot -0,00045 0,0010 -4,53064 Gyan Ngaju CEU -0,00242 0,0009 -27,79900 Sumbanese Ggan Igorot -0,0021 0,0009 -2,35079 Gyan Sk-Dayak CEU -0,00242 0,0009 -27,08320 Sumbanese CEU Igorot -0,00212 0,0009 -2,35079 Gyan Banjar CEU -0,00235 0,0009 <th< td=""><td>Luzon</td><td>СНВ</td><td>Igorot</td><td>-0,00059</td><td>0,00006</td><td>-9,63134</td><td>Sumbanese</td><td>Luhya</td><td>Igorot</td><td>-0,00065</td><td>0,00011</td><td>-5,87579</td></th<>	Luzon	СНВ	Igorot	-0,00059	0,00006	-9,63134	Sumbanese	Luhya	Igorot	-0,00065	0,00011	-5,87579
Gyan CEU Burmese -0,00234 0,0008 -30,74300 Sumbanese Yoruba Igorot -0,0005 0,0011 -5,84816 Gyan Malay-SG CEU -0,00235 0,0009 -28,7207 Sumbanese Eth-Somalian Igorot -0,00047 0,0010 -4,53064 Gyan CEU Sumbanese -0,00240 0,0009 -28,1880 Sumbanese Somalian Igorot -0,00045 0,0010 -4,3306 Gyan Ngaju CEU -0,00242 0,0009 -27,7990 Sumbanese Gyan Igorot -0,0021 0,0009 -2,35079 Gyan Sk-Dayak CEU -0,00242 0,0009 -27,08320 Sumbanese CEU Igorot -0,00112 0,0011 -1,08230 Gyan Banjar CEU -0,00235 0,0009 -26,65450 Temoro S-African_Bantu Ngaju -0,01141 0,0009 -124,99600 Gyan Vjetnamese CFU -0,00238 0,00009 -26,64	Luzon	Vietnamese	Igorot	-0,00046	0,00006	-7,76522	Sumbanese	S-African_Bantu	Igorot	-0,00065	0,00011	-5,85895
Gyan Malay-SG CEU -0,00235 0,0008 -28,72070 Sumbanese Eth-Somalian Igorot -0,00047 0,00010 -4,53064 Gyan CEU Sumbanese -0,00240 0,0009 -28,18800 Sumbanese Somalian Igorot -0,00047 0,00010 -4,53064 Gyan Ngaju CEU -0,00242 0,0009 -27,7990 Sumbanese Gyan Igorot -0,0021 0,0009 -2,35079 Gyan SK-Dayak CEU -0,00242 0,0009 -27,08320 Sumbanese CEU Igorot -0,0012 0,00010 -4,34370 Gyan Banjar CEU -0,00242 0,0009 -27,08320 Sumbanese CEU Igorot -0,0012 0,00011 -1,08230 Gyan Banjar CEU -0,00235 0,0009 -26,65450 Temoro S-African_Bantu Ngaju -0,01140 0,0009 -124,95600 Gyan Vjettnamese CFU -0,00238 0,00009 -26	Gyan	CEU	Burmese	-0,00234	0,00008	-30,74300	Sumbanese	Yoruba	Igorot	-0,00065	0,00011	-5,84816
Gyan CEU Sumbanese -0,00240 0,0009 -28,18800 Sumbanese Somalian Igorot -0,0045 0,0010 -4,34370 Gyan Ngaju CEU -0,00242 0,0009 -27,79900 Sumbanese Gyan Igorot -0,0021 0,0009 -2,35079 Gyan SK-Dayak CEU -0,00242 0,0009 -27,08320 Sumbanese CEU Igorot -0,0012 0,0001 -1,08230 Gyan Banjar CEU -0,00235 0,0009 -26,65450 Temoro S-African_Bantu Ngaju -0,01141 0,0009 -124,99600 Gyan Vjetnamese CFU -0,00238 0,00009 -26,49460 Temoro S-African_Bantu Ngaju -0,01141 0,0009 -124,59200	Gyan	Malay-SG	CEU	-0,00235	0,00008	-28,72070	Sumbanese	Eth-Somalian	Igorot	-0,00047	0,00010	-4,53064
Gyan Ngaju CEU -0,00242 0,0009 -27,79990 Sumbanese Gyan Igorot -0,0021 0,0009 -2,35079 Gyan SK-Dayak CEU -0,00242 0,0009 -27,08320 Sumbanese CEU Igorot -0,0021 0,0001 -1,08230 Gyan Banjar CEU -0,00235 0,0009 -26,65450 Temoro S-African_Bantu Ngaju -0,01130 0,00009 -124,99600 Gyan Vjetnamese CFU -0,00238 0,00009 -26,49640 Temoro S-African_Bantu Ngaju -0,01141 0,0009 -124,52000	Gyan	CEU	Sumbanese	-0,00240	0,00009	-28,18800	Sumbanese	Somalian	Igorot	-0,00045	0,00010	-4,34370
Gyan Sk-Dayak CEU -0,00242 0,0009 -27,08320 Sumbanese CEU Igorot -0,0012 0,0011 -1,08230 Gyan Banjar CEU -0,00235 0,0009 -26,65450 Temoro S-African_Bantu Ngaju -0,01130 0,0009 -124,99600 Gyan Vietnamese CFU -0,00238 0,00009 -26,49400 Temoro S-African_Bantu Sk-Davak -0.01141 0,0009 -124,52000	Gyan	Ngaju	CEU	-0,00242	0,00009	-27,79990	Sumbanese	Gyan	Igorot	-0,00021	0,00009	-2,35079
Gyan Banjar CEU -0.00235 0.00009 -26,65450 Temoro S-African_Bantu Ngaju -0.01130 0.00009 -124,99600 Gvan Vietnamese CFU -0.00238 0.00009 -26,49460 Temoro S-African_Bantu St-Davak -0.01141 0.00009 -124,99600	Gyan	SK-Dayak	CEU	-0,00242	0,00009	-27,08320	Sumbanese	CEU	Igorot	-0,00012	0,00011	-1,08230
Gvan Vietnamese CEU -0.00238 0.00009 -26.49640 Temoro S-African Rantu S-Davak -0.01141 0.0009 -124.52000	Gyan	Baniar	CEU	-0,00235	0,00009	-26,65450	Temoro	S-African Bantu	Ngaju	-0,01130	0,00009	-124,99600
	Gyan	Vietnamese	CEU	-0,00238	0,00009	-26,49640	Temoro	S-African_Bantu	SK-Dayak	-0,01141	0,00009	-124,52900

Gyan	Dusun	CEU	-0,00248	0,00009	-26,47620	Temoro	SK-Dayak	Yoruba	-0,01133	0,00009	-123,75300
Gyan	CEU	Maanyan	-0,00238	0,00009	-26,35860	Temoro	Ngaju	Yoruba	-0,01122	0,00009	-123,16300
Gyan	CEU	Murut	-0,00241	0,00009	-25,80560	Temoro	S-African_Bantu	Maanyan	-0,01147	0,00009	-122,94300
Gyan	CEU	Lebbo	-0,00240	0,00009	-25,68800	Temoro	S-African_Bantu	Banjar	-0,01118	0,00009	-122,91200
Gyan	CEU	Luzon	-0,00224	0,00009	-25,41830	Temoro	S-African_Bantu	Malay-SG	-0,01083	0,00009	-122,90400
Gyan	CEU	СНВ	-0,00225	0,00009	-24,96840	Temoro	Banjar	Yoruba	-0,01112	0,00009	-121,74100
Gyan	CEU	Bajo	-0,00235	0,00010	-24,66920	Temoro	Yoruba	Maanyan	-0,01137	0,00009	-121,48900
Gyan	CEU	Igorot	-0,00231	0,00010	-23,36910	Temoro	Malay-SG	Yoruba	-0,01073	0,00009	-121,35500
Luhya	Eth-Somalian	Yoruba	-0,00072	0,00005	-15,55730	Temoro	Yoruba	Murut	-0,01149	0,00009	-121,07700
Luhya	Yoruba	Somalian	-0,00071	0,00005	-15,36080	Temoro	S-African_Bantu	Murut	-0,01157	0,00010	-120,65900
Luhya	Yoruba	CEU	-0,00101	0,00007	-14,90660	Temoro	Vietnamese	S-African_Bantu	-0,01114	0,00009	-120,07700
Luhya	S-African_Bantu	Somalian	-0,00062	0,00004	-13,93520	Temoro	S-African_Bantu	Luzon	-0,01108	0,00009	-119,93300
Luhya	Gyan	Yoruba	-0,00087	0,00006	-13,82580	Temoro	Yoruba	Luzon	-0,01099	0,00009	-118,51300
Luhya	S-African_Bantu	Eth-Somalian	-0,00059	0,00005	-12,47290	Vezo	S-African_Bantu	Ngaju	-0,01131	0,00009	-126,64300
Luhya	Yoruba	Burmese	-0,00068	0,00007	-10,42080	Vezo	S-African_Bantu	SK-Dayak	-0,01140	0,00009	-125,42300
Luhya	Malay-SG	Yoruba	-0,00068	0,00007	-10,24830	Vezo	S-African_Bantu	Maanyan	-0,01147	0,00009	-124,43700
Luhya	Yoruba	Sumbanese	-0,00067	0,00007	-10,19040	Vezo	S-African_Bantu	Malay-SG	-0,01079	0,00009	-123,28900
Luhya	Dusun	Yoruba	-0,00070	0,00007	-10,17090	Vezo	S-African_Bantu	Banjar	-0,01118	0,00009	-122,99600
Luhya	SK-Dayak	Yoruba	-0,00068	0,00007	-10,16430	Vezo	SK-Dayak	Yoruba	-0,01132	0,00009	-122,00400
Luhya	Ngaju	Yoruba	-0,00068	0,00007	-10,06140	Vezo	Ngaju	Yoruba	-0,01123	0,00009	-121,63800
Luhya	Yoruba	CHB	-0,00068	0,00007	-10,01850	Vezo	S-African_Bantu	Murut	-0,01161	0,00010	-121,03500
Luhya	Yoruba	Luzon	-0,00067	0,00007	-9,95678	Vezo	S-African_Bantu	Luzon	-0,01109	0,00009	-120,72900
Luhya	Vietnamese	Yoruba	-0,00068	0,00007	-9,92264	Vezo	Yoruba	Maanyan	-0,01138	0,00009	-120,61700
Malay-SG	Gyan	Maanyan	-0,00165	0,00006	-26,43780	Vezo	S-African_Bantu	Dusun	-0,01146	0,00010	-120,42300
Malay-SG	Gyan	Murut	-0,00190	0,00007	-26,38870	Vezo	Vietnamese	S-African_Bantu	-0,01113	0,00009	-120,37100
IMalay-SG	SK-Dayak	Gyan	-0,00144	0,00005	-26,33230	Vezo	Malay-SG	Yoruba	-0,01070	0,00009	-119,67100
Malay-SG	Gyan	Igorot	-0,00202	0,00008	-24,03160	Vezo	Banjar	Yoruba	-0,01112	0,00009	-119,60800
Malay-SG	CEU	Maanyan	-0,00168	0,00007	-23,49810	Vezo	Yoruba	Murut	-0,01153	0,00010	-118,59900
Malay-SG	SK-Dayak	CEU	-0,00151	0,00007	-23,18220	Vietnamese	Ngaju	CHB	-0,00062	0,00004	-16,10290
Malay-SG	CEU	Murut	-0,00196	0,00008	-23,08730	Vietnamese	SK-Dayak	CHB	-0,00054	0,00004	-14,28810
Malay-SG	Dusun	Gyan	-0,00159	0,00007	-22,56590	Vietnamese	Banjar	CHB	-0,00053	0,00004	-12,78690
Malay-SG	Ngaju	Gyan	-0,00121	0,00006	-21,92340	Vietnamese	Maanyan	CHB	-0,00052	0,00004	-12,52290
Malay-SG	SK-Dayak	Somalian	-0,00130	0,00006	-21,53510	Vietnamese	Malay-SG	CHB	-0,00043	0,00004	-11,57120
Malay-SG	Eth-Somalian	Murut	-0,00172	0,00008	-21,37210	Vietnamese	CHB	Murut	-0,00042	0,00005	-9,27405
Malay-SG	SK-Dayak	Eth-Somalian	-0,00129	0,00006	-21,28580	Vietnamese	CHB	Lebbo	-0,00047	0,00005	-9,09139
Malay-SG	Somalian	Murut	-0,00169	0,00008	-21,09710	Vietnamese	Dusun	CHB	-0,00033	0,00005	-7,09284
Malay-SG	Eth-Somalian	Maanyan	-0,00138	0,00007	-20,51370	Vietnamese	Burmese	Igorot	-0,00036	0,00005	-6,54163
Malay-SG	Maanyan	Somalian	-0,00137	0,00007	-20,33400	Vietnamese	CHB	Bajo	-0,00025	0,00005	-4,59526
Mikea	S-African_Bantu	SK-Dayak	-0,01002	0,00010	-103,48400	Vietnamese	CHB	Sumbanese	-0,00013	0,00004	-2,85187
Mikea	S-African_Bantu	Ngaju	-0,00991	0,00010	-102,49300	Vietnamese	Gyan	Igorot	-0,00020	0,00009	-2,18635
Mikea	S-African_Bantu	Maanyan	-0,01012	0,00010	-102,06900	Vietnamese	CEU	Igorot	-0,00012	0,00010	-1,17054
Mikea	S-African_Bantu	Murut	-0,01023	0,00010	-100,83700						

Supplementary Table S3 *-f3*-statistics table obtained for the tree configuration (Malagasy population; Asian population; Yoruba) using the Asian-SNP dataset.

	Source					
Source 1	2	Target	f3	SE	Z-score	SNPs
Han	Temoro	Yoruba	0.114	0.005	21.092	1595
Burmese	Temoro	Yoruba	0.108	0.005	21.899	1596
Vietnamese	Temoro	Yoruba	0.119	0.006	20.305	1596
Jehai	Temoro	Yoruba	0.109	0.006	18.594	1592
Bateq	Temoro	Yoruba	0.106	0.006	16.485	1590
Mendriq	Temoro	Yoruba	0.11	0.006	17.136	1593
Kintaq	Temoro	Yoruba	0.108	0.006	18.793	1594
Mah-Meri	Temoro	Yoruba	0.111	0.006	19.042	1591
CheWong	Temoro	Yoruba	0.114	0.006	17.852	1585
Jakun	Temoro	Yoruba	0.117	0.006	19.377	1590
Temuan	Temoro	Yoruba	0.115	0.005	21.534	1589
Seletar	Temoro	Yoruba	0.115	0.007	17.066	1593
Malay	Temoro	Yoruba	0.115	0.005	22.628	1597
Besemah	Temoro	Yoruba	0.119	0.006	21.528	1591
Semende	Temoro	Yoruba	0.123	0.006	21.331	1590
Bidayuh	Temoro	Yoruba	0.118	0.006	21.085	1589
Banjar	Temoro	Yoruba	0.121	0.006	21.923	1593
Ngaju	Temoro	Yoruba	0.12	0.005	22.258	1595
SK-Dayak	Temoro	Yoruba	0.121	0.005	23.247	1596
Ma'anyan	Temoro	Yoruba	0.122	0.006	21.937	1597
Lebbo	Temoro	Yoruba	0.117	0.005	21.457	1593
Murut	Temoro	Yoruba	0.119	0.005	22.637	1593
Dusun	Temoro	Yoruba	0.119	0.006	20.81	1594
Bajo	Temoro	Yoruba	0.116	0.005	21.905	1597
C-Sumbanese	Temoro	Yoruba	0.117	0.005	21.529	1597
E-Sumbanese	Temoro	Yoruba	0.113	0.005	20.879	1597
W-Sumbanese	Temoro	Yoruba	0.114	0.005	21.931	1597
Nusa_Tenga	Temoro	Yoruba	0.107	0.006	18.523	1590
Moluccas	Temoro	Yoruba	0.111	0.006	19.981	1587
PNG highlander	Temoro	Yoruba	0.086	0.008	11.34	1578
Philippine Negrito	Temoro	Yoruba	0.109	0.006	19.665	1587
Filipino	Temoro	Yoruba	0.12	0.006	20.97	1596
Igorot Taiwan	Temoro	Yoruba	0.127	0.006	22.68	1593
Aboriginese	Temoro	Yoruba	0.119	0.006	20.335	1594
Fiji	Temoro	Yoruba	0.103	0.005	19.196	1594
Polynesia	Temoro	Yoruba	0.116	0.006	20.188	1591
Han	Vezo	Yoruba	0.12	0.005	25.6	1620
Burmese	Vezo	Yoruba	0.112	0.005	24.617	1620
Vietnamese	Vezo	Yoruba	0.123	0.005	24.012	1621
Jehai	Vezo	Yoruba	0.111	0.005	20.357	1616

Bateq	Vezo	Yoruba	0.108	0.006	18.361	1614
Mendriq	Vezo	Yoruba	0.113	0.006	20.44	1619
Kintaq	Vezo	Yoruba	0.11	0.006	18.975	1615
Mah-Meri	Vezo	Yoruba	0.118	0.005	21.917	1616
CheWong	Vezo	Yoruba	0.121	0.006	19.101	1605
Jakun	Vezo	Yoruba	0.119	0.006	21.084	1612
Temuan	Vezo	Yoruba	0.119	0.005	23.297	1612
Seletar	Vezo	Yoruba	0.114	0.006	18.853	1615
Malay	Vezo	Yoruba	0.12	0.005	24.098	1622
Besemah	Vezo	Yoruba	0.124	0.005	24.584	1614
Semende	Vezo	Yoruba	0.126	0.005	24.929	1614
Bidayuh	Vezo	Yoruba	0.124	0.006	21.471	1613
Banjar	Vezo	Yoruba	0.127	0.005	25.264	1617
Ngaju	Vezo	Yoruba	0.125	0.005	24.353	1620
SK-Dayak	Vezo	Yoruba	0.126	0.005	26.05	1622
Ma'anyan	Vezo	Yoruba	0.128	0.005	25.407	1622
Lebbo	Vezo	Yoruba	0.122	0.006	21.471	1616
Murut	Vezo	Yoruba	0.124	0.005	22.842	1619
Dusun	Vezo	Yoruba	0.127	0.005	23.517	1619
Bajo	Vezo	Yoruba	0.117	0.005	24.57	1620
C-Sumbanese	Vezo	Yoruba	0.119	0.005	23.606	1621
E-Sumbanese	Vezo	Yoruba	0.116	0.005	23.617	1622
W-Sumbanese	Vezo	Yoruba	0.115	0.005	24.193	1622
Nusa_Tenga	Vezo	Yoruba	0.112	0.006	20.193	1615
Moluccas	Vezo	Yoruba	0.115	0.005	22	1613
PNG highlander	Vezo	Yoruba	0.082	0.008	10.777	1603
Philippine Negrito	Vezo	Yoruba	0.113	0.005	21.12	1609
Filipino	Vezo	Yoruba	0.123	0.005	24.999	1619
Igorot Taiwan	Vezo	Yoruba	0.13	0.005	23.754	1618
Aboriginese	Vezo	Yoruba	0.125	0.006	21.543	1618
Fiji	Vezo	Yoruba	0.106	0.005	19.416	1616
Polynesia	Vezo	Yoruba	0.121	0.006	21.102	1614
Han	Mikea	Yoruba	0.116	0.005	22.42	1621
Burmese	Mikea	Yoruba	0.11	0.005	22.506	1622
Vietnamese	Mikea	Yoruba	0.118	0.006	21.511	1621
Jehai	Mikea	Yoruba	0.106	0.005	20.259	1619
Bateq	Mikea	Yoruba	0.103	0.006	16.336	1616
Mendriq	Mikea	Yoruba	0.107	0.006	18.533	1619
Kintaq	Mikea	Yoruba	0.108	0.006	18.301	1616
Mah-Meri	Mikea	Yoruba	0.113	0.005	20.671	1615
CheWong	Mikea	Yoruba	0.115	0.006	19.484	1612
Jakun	Mikea	Yoruba	0.118	0.006	20.018	1616
Temuan	Mikea	Yoruba	0.115	0.005	21.211	1615
Seletar	Mikea	Yoruba	0.109	0.006	19.324	1617
Malay	Mikea	Yoruba	0.115	0.005	22.626	1622
Besemah	Mikea	Yoruba	0.122	0.006	21.96	1615

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Semende	Mikea	Yoruba	0.12	0.006	20.337	1616
Bidayuh	Mikea	Yoruba	0.121	0.006	21.17	1616
Banjar	Mikea	Yoruba	0.122	0.005	22.223	1619
Ngaju	Mikea	Yoruba	0.119	0.006	21.055	1622
SK-Dayak	Mikea	Yoruba	0.123	0.005	23.21	1622
Ma'anyan	Mikea	Yoruba	0.123	0.006	21.426	1622
Lebbo	Mikea	Yoruba	0.121	0.006	21.713	1618
Murut	Mikea	Yoruba	0.118	0.005	21.946	1621
Dusun	Mikea	Yoruba	0.124	0.006	20.771	1621
Bajo	Mikea	Yoruba	0.116	0.005	21.556	1622
C-Sumbanese	Mikea	Yoruba	0.116	0.006	19.959	1622
E-Sumbanese	Mikea	Yoruba	0.113	0.006	19.793	1621
W-Sumbanese	Mikea	Yoruba	0.115	0.005	21.267	1621
Nusa_Tenga	Mikea	Yoruba	0.114	0.006	18.352	1618
Moluccas	Mikea	Yoruba	0.116	0.006	17.925	1614
PNG highlander	Mikea	Yoruba	0.089	0.008	10.992	1603
Philippine Negrito	Mikea	Yoruba	0.109	0.006	17.881	1613
Filipino	Mikea	Yoruba	0.121	0.006	21.286	1621
Igorot Taiwan	Mikea	Yoruba	0.126	0.006	20.052	1618
Aboriginese	Mikea	Yoruba	0.12	0.006	20.126	1620
Fiji	Mikea	Yoruba	0.107	0.006	18.074	1619
Polynesia	Mikea	Yoruba	0.12	0.006	18.604	1618

Supplementary Table S4 - F_{ST} genetic distances (lower diagonal) between 'Asian-SNP' Malagasy and data from the Asian populations of the high density dataset, and the corresponding standard deviation (upper diagonal).

FST \ S.D.	Vezo	Mikea	Temoro	СНВ	Burmese	Vietnamese	Malav-SG	Baniar	Ma'anvan	Ngaiu	SK-Davak	Lebbo	Murut	Dusun	Baio	Sumbanese	Filipino	laorot
Vezo	0	0.005	0.006	0.004	0.004	0.003	0.004	0.003	0.004	0.003	0.003	0.004	0.004	0.004	0.003	0.003	0.003	0.003
Mikea	0.01	0	0.006	0.005	0.004	0.005	0.004	0.005	0.004	0.004	0.004	0.005	0.005	0.005	0.004	0.004	0.005	0.005
Temoro	0.007	0.016	0	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.005	0.004	0.004	0.004	0.005
СНВ	0.035	0.041	0.031	0	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.002
Burmese	0.032	0.034	0.024	0.009	0	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.002
Vietnamese	0.026	0.032	0.021	0.007	0.009	0	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.002
Malay-SG	0.019	0.028	0.015	0.015	0.009	0.007	0	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.002
Banjar	0.021	0.029	0.016	0.02	0.015	0.009	0.004	0	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.002	0.001	0.002
Ma'anyan	0.026	0.036	0.021	0.028	0.024	0.017	0.009	0.008	0	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.002
Ngaju	0.021	0.028	0.016	0.021	0.015	0.011	0.003	0.004	0.008	0	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.002
SK-Dayak	0.018	0.025	0.015	0.019	0.014	0.01	0.002	0.002	0.005	0.001	0	0.002	0.001	0.001	0.001	0.001	0.001	0.002
Lebbo	0.043	0.046	0.036	0.042	0.036	0.034	0.024	0.027	0.034	0.027	0.025	0	0.002	0.002	0.002	0.002	0.002	0.003
Murut	0.033	0.041	0.027	0.028	0.028	0.021	0.016	0.018	0.024	0.016	0.015	0.035	0	0.002	0.001	0.002	0.001	0.002
Dusun	0.033	0.041	0.026	0.028	0.026	0.02	0.017	0.016	0.022	0.019	0.015	0.036	0.023	0	0.001	0.002	0.001	0.002
Bajo	0.028	0.032	0.018	0.02	0.016	0.014	0.008	0.011	0.019	0.011	0.009	0.028	0.02	0.019	0	0.001	0.001	0.002
Sumbanese	0.031	0.037	0.019	0.025	0.02	0.019	0.011	0.015	0.021	0.014	0.012	0.032	0.025	0.024	0.008	0	0.001	0.002
Filipino	0.023	0.028	0.017	0.013	0.015	0.008	0.006	0.008	0.013	0.009	0.006	0.028	0.013	0.012	0.007	0.012	0	0.002
Igorot	0.051	0.056	0.043	0.047	0.05	0.039	0.037	0.038	0.042	0.038	0.037	0.057	0.04	0.041	0.038	0.044	0.026	0

Supplementary Table S5 – GLOBETROTTER inferred dates (in both generations from present and years, bootstrap 95% CIs given in parenthesis; YBP = years before present), admixing sources, and percentage (%) of admixture for each population of interest (Hellenthal, et al. 2014). We assume a generation time of 25 years. R^2 corresponds to the goodness-of-fit of the tested model. FQ₁ and FQ₂ correspond respectively to the fit of a single admixture event and the fit of the first two principal components capturing the admixture events. M corresponds to the additional R^2 explained by adding a second date versus assuming only a single date of admixture (M>0.35 to infer multiple dates event). The admixture models presented in the table correspond to the best fit models considering the 'best guess'. P: p-value of evidence of any detectable admixture event obtained after 100 bootstrap resamplings of the NULL procedure. Date confidence intervals are based on 100 bootstrap replicates of the date inference.

Target Group	Analysis	Р	R²	FQ₁	FQ₂	М	Best-guess	1-date (gen.)	1-date (YBP)	1-date Best Surrogate 1	1-date Best Surrogate 2	2-date (gen.)	2-date (YBP)	2-date Best Surrogate 1	2-date Best Surrogate 2
V/070	main	< 0.01	0.996	1	1	0.095	one-date	25 (24-27)	625 (600-675)	Banjar (39%)	S.A.Bantu (61%)	-	-	-	-
Vezo	main.null	< 0.01	0.996	1	1	0.012	one-date	25 (24-27)	625 (600-675)	Banjar (38%)	S.A.Bantu (62%)	-	-	-	-
Mikea	main	< 0.01	0.993	1	1	0.142	one-date	27 (25-29)	675 (625-725)	Banjar (36%)	S.A.Bantu (64%)	-	-	-	-
IVIIKea	main.null	< 0.01	0.991	1	1	0.255	one-date	27 (25-29)	675 (625-725)	Banjar (36%)	S.A.Bantu (64%)	-	-	-	-
Temoro	main	< 0.01	0.996	1	1	0.076	one-date	30 (29-31)	750 (725-775)	Banjar (37%)	S.A.Bantu (63%)	-	-	-	-
Temolo	main.null	< 0.01	0.995	1	1	0.102	one-date	30 (28-31)	750 (725-775)	Banjar (37%)	S.A.Bantu (63%)	-	-	-	-
Bonior	main	< 0.01	0.621	1	1	0.078	one-date	17 (11-20)	425 (275-500)	Ma'anyan (23%)	Malay (77%)	-	-	-	-
Darijai	main.null	< 0.01	0.615	1	1	0.042	one-date	23 (14-32)	575 (350-800)	Ma'anyan (24%)	Malay (76%)	-	-	-	-
Nasiu	main	< 0.01	0.521	1	1	0.082	one-date	16 (9-19)	400 (225-475)	Ma'anyan (19%)	Malay (81%)	-	-	-	-
ingaju	main.null	< 0.01	0.554	1	1	0.045	one-date	20 (17-23)	500 (425-575)	Ma'anyan (43%)	Malay (57%)	-	-	-	-

SK Dayak	main	< 0.01	0.463	1	1	0.127	one-date	12 (7-16)	300 (175-400)	Malay (21%)	Ma'anyan (79%)	-	-	-	-
SK Dayak	main.null	< 0.01	0.615	1	1	0.084	one-date	19 (11-35)	475 (275-875)	Malay (27%)	Ma'anyan (73%)	-	-	-	-
Malay	main	< 0.01	0.959	0.972	2 0.989	0.481	multiple-dates	7 (2-10)	175 (50-250)	Burmese (24%)	Filipino (76%)	42 (29-58)	1050 (725-1450)	Brahmin (14%)	Filipino (86%)
Walay	main.null	< 0.01	0.94	0.979	0.992	0.514	multiple-dates	9 (4-15)	225 (100-375)	Burmese (16%)	Filipino (84%)	66 (43-111)	1650 (1075-2775)	Brahmin (19%)	Filipino (81%)
Bajo	main	< 0.01	0.946	0.882	2 0.998	0.22	one-date-multiway	35 (32-40)	875 (800-1000)	Sumbanese (23%), Brahmin (12%)	Banjar (25%), Filipino (25%), Malay (11%), Ngaju (6%)	-	-	-	-
	main.null	< 0.01	0.953	0.96	0.999	0.22	one-date-multiway	47 (43-54)	1175 (1075-1350)	Sumbanese (27%), Brahmin (15%)	Banjar (23%), Filipino (27%), Ngaju (8%)	-	-	-	-

Supplementary Table S6 – Estimated dates of admixture in Malagasy ethnic groups using Banjar and South African Bantu data as

Test Pop	Ref A	Ref B	p-value	2-ref z- score	1-ref z-score A	1-ref z-score B	max decay diff (%)	2-ref decay (gen.)	2-ref amp_exp
Temoro	Banjar	South Africa Bantu	5.1e-81	19.34	17.87	22.90	0.03	29.16 +/- 1.08	0.0018 +/- 0.0001
Mikea	Banjar	South Africa Bantu	6.9e-85	19.79	18.70	11.12	0.09	25.21 +/- 1.27	0.0017 +/- 0.0001
Vezo	Banjar	South Africa Bantu	2.6e-69	17.89	18.88	15.81	0.01	22.29 +/- 1.25	0.0017 +/- 0.0001

parental populations with ALDER (Loh, et al. 2013).

Supplementary Methods

Sample collection and ethics

A total of 41 DNA samples were analyzed from two groups in Southeast Borneo: the Banjar (n=16) and the Ngaju (n=25) that were collected in Banjarmasin city (Supplementary Figure S1). Blood samples were collected from healthy adult donors, all of whom provided written informed consent. DNA was extracted using a standard salting-out procedure. All participants were surveyed for language affiliation, current residence, familial birthplaces, and a genealogy of four generations to establish ancestry. This study was approved by the Research Ethics Commission of the Eijkman Institute for Molecular Biology (Jakarta, Indonesia). Genome-wide SNP genotyping for individuals from the two groups were performed using the Illumina Human Omni Express Bead Chip-24 v1.0 (Illumina Inc., San Diego, CA), which characterizes 730,525 single nucleotide markers regularly spaced across the genome. The accession number for the Southeast Borneo samples genotyped for this study is EGA: EGAS00001001841.

Dataset

We gathered data from previously published studies on populations from Madagascar, Southeast Asia, South Asia, East Asia, East Africa, South Africa, and Europe (Supplementary Table S1). Two datasets were compiled respective to their analytical use: a low SNP density dataset of populations covering a large geographical area; and a high SNP density dataset of populations composed by a subset of populations of the latter dataset. To avoid any statistical bias that could be induced by a size effect due to populations over-represented in the high SNP density

22

dataset, we randomly selected a maximum of 31 individuals in each group, such as each population has a number of individuals between 15 and 31. Quality controls were applied using Plink v1.9 (Chang, et al. 2015) to filter for i) close relatives, using an Identity-by-Descent (IBD) estimation with upper threshold of 0.25 (second degree relatives); ii) SNPs that failed the Hardy-Weinberg exact (HWE) test (P < 10-6) were excluded; iii) samples with a call rate <0.99 and displayed missing rates >0.05 across all samples in each population were excluded; and iv) variants in high linkage disequilibrium ($r^2 > 0.5$) were also removed for the low density dataset. After filtering, the low SNP density dataset included 2183 individuals from 61 populations genotyped for 40,272; and the SNPs high SNP density dataset was composed of 551 individuals from 24 populations genotyped for 374,189 SNPs. All genotypes of the high SNP density dataset were then phased together with SHAPEIT v2.r790 (Delaneau, et al. 2012) using the 1000Genomes phased data (Delaneau, et al. 2014) as reference panel and the HapMap phase 2 genetic map (International HapMap 2005).

Statistical Analyses

The low density dataset was described by the following analyses. Principal Components Analysis was computed with EIGENSOFT v6.0.1 (Patterson et al. 2006). ADMIXTURE v1.23 (Alexander et al. 2009) was used to estimate the profile of individual genomic ancestries using maximum likelihood for components K = 2 to K = 18. Ten replicates were run at each value of K with different random seeds, then merged and assessed for clustering quality using CLUMPP (Jakobsson and Rosenberg 2007), and the cross-validation value was calculated to determine the optimal number of genomic components (here, K = 16). ADMIXTURE and PCA plots

were generated with Genesis (Buchmann and Hazelhurst 2014). Three-population (f3) statistics (Patterson, et al. 2012) were computed for each trios of populations of the low SNP density dataset to identify groups showing potential recent admixture event. TreeMix v1.12 analysis (Pickrell and Pritchard 2012) was performed with all Asian populations and three representative of African groups (Yoruba, Luhya, South African Bantu), to estimate gene flows from Asian groups and their relative intensity, with blocks of 200 SNPs to account for linkage disequilibrium and migration edges added sequentially until the model explained 99% of the variance (the TreeMix outputs in Newick format were visualized with MEGA v7.0.14 (Tamura, et al. 2013)). Population structure of the phased high density dataset was evaluated using the fineSTRUCTURE v2.07 package (Lawson et al. 2012). It uses the detection of shared IBD fragments between each pair of individuals, without self-copying, calculated with Chromopainter v2.0 (Lawson et al. 2012) to perform a model-based Bayesian clustering of genotypes. From the results, a coancestry heat map and a dendrogram were inferred to visualize the number of clusters statistically defined that would describe relevantly the data. FineSTRUCTURE v2 identified 37 groups of individuals that can be statistically defined as natural populations (Lawson et al. 2012), according to their shared Identity-By-Descent (IBD) (bootstrapped nodes>60%: Supplementary figure S7). Most of these correspond to anthropologically defined populations, such as the Banjar or the Ngaju, with few exceptions (e.g., the sub-structuration of the Kenyan Luhya group). Although each Malagasy individual has its closest connections with other Malagasy, regardless of their ethnicity, these ethnic groups were treated separately for anthropological interest. Haplotype sharing between pairs of individuals was estimated from the phased high SNP density dataset by the Refined IBD algorithm of Beagle v4.0

24

(Browning and Browning 2007; Browning and Browning 2013), filtering for detected fragments with a logarithm of odds ratio (LOD)>3. 10 iterations were realized, randomizing the seed number for each run, and the overlapping shared fragments were merged to favour the detection of long shared IBD. Detected fragments between the same pairs of individuals were summed up and visualized with Cytoscape v3.2.1 (Shannon et al. 2003). IBD sharing data with Malagasy individuals was also averaged per Asian population to geographically plot a gradient map with Surfer v12.0 using the Kriging method (GoldenSoftware 2014). All maps used in the present study were generated using Global Mapper v.15 software. (http://www.bluemarblegeo.com/products/global-mapper.php). Local ancestry analysis in Malagasy individuals was performed with PCAdmix v1.0 (Brisbin et al. 2012) using two parental metapopulations of 100 individuals of African ancestry (randomly selected in Yoruba, South African Bantu, Kenyan Luhya and Somali groups), and of Asian ancestry (randomly selected in Han, Igorot, Ma'anyan and Malay groups). The phased Malagasy data were screened using the linkage disequilibrium information to define the probability of common ancestry of each Malagasy haplotype with each 'parental' metapopulation. The Viterbi algorithm was then used to mask all haplotypes according to one or the other ancestry in the Malagasy individuals. Ancestry-specific PCAs and F_{ST} calculations were realized with EIGENSOFT v6.0.1 (Patterson et al. 2006). Three-population (f3) statistics (Patterson et al. 2012) and TreeMix v1.12 analysis (Pickrell and Pritchard 2012) were also performed on this masked dataset (1,664 SNPs for 18 populations). Haplotype 'painting' with Chromopainter v2 (Lawson et al. 2012) was realized on the high density of SNP dataset, defining each cluster of populations as target or donor/surrogate according to the anthropological question addressed. Mutational

rates and Ne parameters were first estimated with an Estimation-Maximization (EM) algorithm running Chromopainter v2 on all 22 autosomes for the entire dataset with 10 iterations (Lawson et al. 2012). The weighted average of these parameters, according to the SNP coverage of each used chromosomes and the number of individuals, were then used to compute the chromosomal painting. Each cluster of populations has been successively identified as target and the others as surrogates (at the exclusion of the Malagasy cluster which has not been used as surrogate). The obtained painted chromosomes for each cluster were used in GLOBETROTTER v1.0 (Hellenthal et al. 2014) to estimate the ratios and the dates of the potential admixture events characterizing them. Coancestry curves were estimated with and without standardization with a 'NULL' individual, and consistency between each estimated parameters was checked. 100 bootstrap resamplings were realized to estimate the pvalue of the admixture events (considering the 'NULL' individual) and the 95% confidence interval for the obtained dates (without the 'NULL' individual). The 'bestguess' scenario given by GLOBETROTTER v1.0 (Hellenthal et al. 2014) was considered for each target population. Using the parental populations given by GLOBETROTTER v1.0 (Hellenthal et al. 2014), dates of admixture were also estimated by ALDER v1 (Loh et al. 2013).

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