Table S3. Intra- and interspecific corrected (GTR+Γ+I) and uncorrected pairwise distances among equids

	A								B								C			
	Uncorrected pairwise distances				GTR+G+I pairwise distances				Uncorrected pairwise distances				GTR+G+I pairwise distances				Uncorrected pairwise distances			
	Average	Median	5%-lower	95%-upper	Average	Median	5%-lower	95%-upper	Average	Median	5%-lower	95%-upper	Average	Median	5%-lower	95%-upper	Average	Median	5%-lower	95%-upper
CAB	2,50%	2,66%	0,33%	4,02%	2,70%	2,84%	0,33%	4,45%	2,43%	2,47%	0,41%	4,12%	2,60%	2,61%	0,42%	4,52%	3,56%	3,37%	1,12%	6,74%
ASI	2,18%	2,99%	0,00%	4,32%	2,38%	3,22%	0,00%	4,82%	2,06%	2,47%	0,00%	4,12%	2,21%	2,61%	0,00%	4,52%	2,04%	2,25%	0,00%	4,49%
QUA(ALL-J2/ALL)	1,96%	1,84%	0,33%	4,01%	2,12%	1,93%	0,34%	4,45%	3,31%	3,33%	0,83%	5,48%	3,64%	3,60%	0,85%	6,24%	5,36%	5,75%	1,15%	9,32%
QUA(J2/ALL)	1,96%	1,67%	0,67%	3,28%	2,08%	1,74%	0,68%	3,57%	2,69%	2,90%	0,83%	4,58%	2,90%	3,10%	0,85%	5,10%	4,92%	4,78%	1,26%	8,01%
QUA	1,95%	1,67%	0,33%	4,01%	2,10%	1,74%	0,34%	4,45%	3,29%	3,32%	0,83%	5,44%	3,61%	3,59%	0,85%	6,20%	5,34%	5,75%	1,15%	9,31%
GRE	0,67%	0,00%	0,00%	3,00%	0,72%	0,00%	0,00%	3,23%	0,74%	0,00%	0,00%	3,72%	0,81%	0,00%	0,00%	4,05%	0,91%	0,00%	0,00%	4,55%
ZEB	3,06%	3,01%	0,67%	5,02%	3,34%	3,25%	0,68%	5,70%	3,31%	3,31%	0,41%	5,79%	3,63%	3,56%	0,42%	6,61%	3,55%	3,41%	0,00%	7,95%
HEM	4,17%	4,78%	0,37%	5,61%	4,71%	5,40%	0,37%	6,48%	3,78%	3,72%	0,47%	5,70%	4,18%	4,05%	0,47%	6,51%	3,93%	3,28%	0,00%	8,20%
KIA	1,52%	1,10%	0,00%	3,31%	1,61%	1,13%	0,00%	3,60%	1,18%	0,93%	0,00%	2,80%	1,25%	0,95%	0,00%	2,98%	1,42%	1,64%	0,00%	3,28%
Average (extant species)	**2,45%**	**2,66%**	**0,33%**	**4,32%**	**2,64%**	**2,84%**	**0,33%**	**4,82%**	**2,39%**	**2,47%**	**0,41%**	**4,12%**	**2,56%**	**2,61%**	**0,42%**	**4,52%**	**3,38%**	**3,37%**	**0,00%**	**6,74%**
HIP	1,54%	1,67%	0,33%	3,01%	1,62%	1,74%	0,34%	3,25%	1,41%	1,25%	0,00%	2,89%	1,48%	1,28%	0,00%	3,09%	1,14%	1,14%	0,00%	2,27%
ONO	0,67%	0,68%	0,33%	0,95%	0,68%	0,69%	0,34%	0,98%	0,55%	0,41%	0,41%	0,76%	0,56%	0,42%	0,42%	0,77%	0,75%	1,12%	0,00%	1,12%
SUS	4,43%	4,32%	2,33%	6,30%	5,06%	4,82%	2,46%	7,44%	4,39%	5,35%	1,23%	6,40%	5,01%	6,06%	1,27%	7,45%	5,24%	7,87%	0,00%	7,87%
STL	2,01%	2,01%	1,00%	2,92%	2,13%	2,11%	1,03%	3,14%	2,48%	2,47%	1,23%	3,61%	2,64%	2,62%	1,26%	3,92%	2,04%	2,22%	0,00%	3,33%
HYD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,28%	3,28%	3,28%	3,28%
CAB/ASI	11,40%	11,30%	10,30%	12,62%	15,74%	15,53%	13,68%	18,12%	11,56%	11,52%	10,29%	12,76%	15,52%	15,41%	13,26%	17,73%	23,35%	23,60%	21,35%	25,84%
QUA/GRE	9,23%	9,27%	8,41%	10,08%	11,90%	11,95%	10,55%	13,34%	10,22%	10,37%	9,16%	11,23%	13,24%	13,47%	11,49%	14,95%	20,71%	20,71%	18,54%	23,16%
QUA/ZEB	13,11%	13,08%	11,74%	14,49%	19,17%	19,04%	16,33%	22,18%	13,46%	13,31%	11,62%	15,38%	19,17%	18,82%	15,60%	23,20%	25,24%	25,32%	21,92%	28,90%
GRE/ZEB	14,43%	14,42%	13,40%	15,77%	22,08%	22,00%	19,72%	25,27%	13,89%	14,06%	12,83%	15,33%	19,98%	20,32%	17,80%	23,02%	24,44%	23,97%	22,80%	28,66%
ASI/HEM	7,47%	7,71%	4,80%	9,94%	9,20%	9,48%	5,43%	13,07%	6,86%	6,95%	4,23%	8,89%	8,14%	8,19%	4,67%	11,05%	8,82%	10,16%	4,61%	14,90%
ASI/KIA	6,98%	7,01%	6,25%	7,72%	8,40%	8,44%	7,37%	9,49%	6,74%	6,61%	6,09%	7,94%	7,93%	7,74%	7,03%	9,61%	8,12%	7,88%	6,49%	11,24%
HEM/KIA	5,25%	5,33%	3,60%	6,99%	6,05%	6,11%	3,95%	8,39%	5,04%	5,35%	3,72%	6,51%	5,70%	6,06%	4,05%	7,59%	5,92%	6,56%	3,28%	8,52%
HYD/HEM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,46%	3,28%	1,64%	6,56%
HYD/KIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,64%	4,92%	1,64%	8,20%
Average (extant species)	**11,36%**	**11,30%**	**9,99%**	**12,62%**	**15,67%**	**15,53%**	**13,16%**	**18,12%**	**11,53%**	**11,52%**	**10,29%**	**12,76%**	**15,47%**	**15,41%**	**13,26%**	**17,73%**	**23,21%**	**23,59%**	**20,22%**	**25,84%**
CAB/HIP	9,48%	9,39%	8,09%	11,12%	12,32%	12,12%	10,05%	15,14%	9,70%	9,60%	8,32%	11,26%	12,34%	12,14%	10,16%	14,93%	21,42%	21,42%	19,48%	23,29%
ASI/HIP	10,41%	10,42%	9,40%	11,42%	13,94%	13,94%	12,15%	15,80%	10,75%	10,80%	9,60%	12,07%	14,11%	14,20%	12,16%	16,44%	20,09%	19,97%	18,77%	22,17%
ONO/CAB	10,49%	10,47%	9,40%	11,81%	14,01%	13,95%	12,13%	16,44%	11,24%	11,22%	10,20%	12,66%	14,88%	14,82%	13,10%	17,44%	24,66%	24,79%	22,01%	27,26%
ONO/HIP	7,18%	7,08%	6,31%	8,10%	8,69%	8,52%	7,44%	10,05%	7,85%	7,90%	6,67%	9,21%	9,49%	9,54%	7,80%	11,53%	14,96%	14,73%	13,57%	16,54%
ONO/ASI	13,61%	13,61%	13,08%	14,42%	20,21%	20,19%	19,09%	22,00%	15,52%	15,52%	14,69%	16,40%	23,53%	23,42%	21,63%	25,61%	31,74%	31,35%	29,79%	33,57%
CAB/STL	9,48%	9,40%	8,67%	10,40%	12,28%	12,13%	10,95%	13,84%	10,66%	10,75%	9,58%	11,70%	13,91%	14,05%	12,10%	15,68%	20,28%	20,57%	17,22%	22,84%
ONO/STL	8,43%	8,38%	7,15%	9,76%	10,60%	10,48%	8,63%	12,73%	9,80%	9,57%	8,41%	11,47%	12,50%	12,09%	10,28%	15,27%	20,73%	20,74%	18,42%	22,59%
ASI/STL	12,15%	12,04%	11,47%	13,04%	17,20%	16,94%	15,86%	19,03%	13,73%	13,63%	12,87%	14,87%	19,70%	19,51%	17,95%	22,08%	24,72%	24,97%	21,64%	27,22%
SUS/HEM	7,24%	6,97%	5,88%	8,75%	8,80%	8,37%	6,85%	11,08%	6,89%	6,58%	5,63%	8,45%	8,15%	7,69%	6,42%	10,36%	8,67%	8,68%	5,02%	11,75%
SUS/ASI	11,77%	11,64%	10,64%	12,98%	16,46%	16,18%	14,29%	18,89%	11,44%	11,60%	9,51%	12,86%	15,36%	15,58%	12,03%	17,98%	20,95%	21,66%	18,29%	22,98%
SUS/QUA	12,80%	13,69%	9,37%	15,06%	18,68%	20,31%	12,09%	23,46%	11,82%	12,07%	9,56%	13,72%	16,01%	16,38%	12,10%	19,53%	18,85%	18,55%	15,08%	23,04%
SUS/GRE	9,57%	9,69%	9,20%	9,75%	12,43%	12,64%	11,80%	12,74%	9,80%	9,97%	9,36%	9,99%	12,49%	12,77%	11,77%	12,81%	16,21%	15,08%	15,08%	18,46%
SUS/ZEB	13,92%	13,89%	12,36%	15,13%	20,87%	20,75%	17,50%	23,63%	12,46%	12,48%	10,82%	13,81%	17,13%	17,13%	14,15%	19,73%	19,44%	19,69%	16,24%	23,02%

The different values presented are estimated from the different datasets provided as supplemental text using either corrected (GTR+Γ+I, alpha=0.779 and I=0.572 estimated from the phylogenetic analysis presented on Fig. 1) or uncorrected pairwise distances. In C, only uncorrected distances are provided given the short length of the alignment. CAB: *E. caballus*; ASI: *E. asinus*; QUA: *E. quagga* (all Plains zebras, including *E. quagga quagga*); QUA_J2: node J2 is defined on fig 1 and includes samples ACAD226 and ACAD230; QUA_ALL-J2: QUA but excluding samples for node J2; GRE: *E. grevyi*; ZEB: *E. hartmannae*; HEM: *E. hemionus*; KIA: *E. kiang*; HIP: *Hippidion saldiasi/principale*; HYD: *E. hydruntinus*; ONO: *Hippidion devillei* (Peruvian hippidions); SUS: Sussemiones (Khakassia, SW Siberia); CAP: *E. capensis*; STL: New World Stilt Legged horses. A, the dataset consisted of 1544 sequences encompassing positions 15518 and 15818 from the complete horse mitochondrial genome, Accession Number. X79547. B, the dataset consisted of 1866 sequences encompassing positions 15518 and 15760 **from the** complete horse mitochondrial genome, Accession Number X79547. C, the dataset consisted of 1878 sequences encompassing positions 15518 and 15606 from the complete horse mitochondrial genome, Accession Number. X79547.