







14.4%



Supplementary Figure 2: Impact of the genome coverage in allele frequency ploidy estimations. To evaluate the impact of the genome coverage in the allele frequency ploidy estimations, we evaluated the allele frequency of the D11 isolate using 25% (A), 50% (B), or 75% (C) of its reads, corresponding to the genome coverages of 6.92, 13.84 and 20.76x, respectively. The peaks in 0.33 and 0.66 that are suggestive of partial triploidy are observed with ~20x coverage, similarly to what is observed with 100% of the reads (D). From the 26 *T. brucei* samples evaluated, only D1 (E) and ytat (F) had coverages lower than 20x, but only D11 had peaks suggestive of partial triploidy in the parasite population.



Supplementary Figure 3: Chromosomal somy estimated based on allele frequency. For each chromosome, the proportion of the alleles in each predicted heterozygous site was obtained and rounded to the second place. Base frequencies were rounded in 100 categories, ranging from 0.01 to 1.00, and an approximate distribution of base frequencies for each chromosome was plotted in R. Diploid chromosomes had a peak in 0.50 (A), while triploid chromosomes had peaks in 0.33 and 0.66 (B). Tetraploid chromosomes had combination of peaks of 0.25, 0.75 and 0.50 (C). Each slide correspond to somy predictions of the eleven *T. brucei* chromosomes, based on each of the read libraries described in table 1. The *T. brucei* subspecies and isolate/strain name is described in the top of each slide.







T. b. rhodesiense - Isolate Apendum













T. b. rhodesiense - Isolate STIB704C





T. b. rhodesiense - Isolate LWO30A



T. b. rhodesiense - Isolate Okware











T. b. rhodesiense - Isolate LWO150A



T. b. rhodesiense - Isolate LWO24A



T. b. rhodesiense - Isolate LWO07A



T. b. rhodesiense - Isolate LWO011A



T. b. brucei - Isolate STIB920



T. b. brucei - Isolate STIB348TBABB



<u>T. b. brucei – Isolate Cow248</u>



T. b. brucei – Isolate 503



<u>T. b. gambiense – Isolate I5</u>



<u>T. b. gambiense – Isolate I7</u>



Supplementary Figure 4: RDC variation along *T. brucei* chromosomes. The blue line corresponds to the normalized RDC of each position, estimated by the ratio between the RDC and the genome coverage. Below, the protein-coding genes are depicted as rectangles drawn as proportional to their length, and their coding strand is indicated by their position above (top strand) or below (bottom strand) the central line. Cyan boxes represent VSGs and ESAGs. Black rectangles represent all other genes. Gaps are represented by gene-less regions with no read coverage. The possible regions of segmental duplication are highlighted by red boxes.



Isolate 503





503-Tb927.03_v5.1










503-Tb927.07_v5.1

503-Tb927.08_v5.1









503-Tb927.11_v5.1



Isolate Angwen





Angwen-Tb927.03_v5.1

Angwen-Tb927.04_v5.1









Angwen-Tb927.07_v5.1

Angwen-Tb927.08_v5.1









Angwen-Tb927.11_v5.1



Isolate cow428

















cow428-Tb927.08_v5.1











cow428-Tb927.11_v5.1







D1-Tb927.03_v5.1











D1-Tb927.07_v5.1

D1-Tb927.08_v5.1









D1-Tb927.11_v5.1







D2-Tb927.03_v5.1











D2-Tb927.07_v5.1











D2-Tb927.11_v5.1







D3-Tb927.03_v5.1











D3-Tb927.07_v5.1

D3-Tb927.08_v5.1









D3-Tb927.11_v5.1







D4-Tb927.03_v5.1











D4-Tb927.07_v5.1

D4-Tb927.08_v5.1









D4-Tb927.11_v5.1







D5-Tb927.03_v5.1











D5-Tb927.07_v5.1

D5-Tb927.08_v5.1









D5-Tb927.11_v5.1







D7-Tb927.03_v5.1











D7-Tb927.07_v5.1

D7-Tb927.08_v5.1









D7-Tb927.11_v5.1







D11-Tb927.03_v5.1










D11-Tb927.07_v5.1











D11-Tb927.11_v5.1



Isolate D16

















D16-Tb927.07_v5.1

D16-Tb927.08_v5.1









D16-Tb927.11_v5.1



Isolate Dog157





Dog157-Tb927.03_v5.1

Dog157-Tb927.04_v5.1









Dog157-Tb927.06_v5.1

Dog157-Tb927.08_v5.1









Dog157-Tb927.11_v5.1



Isolate I5





I5-Tb927.03_v5.1











l5-Tb927.07_v5.1

l5-Tb927.08_v5.1









l5-Tb927.11_v5.1



Isolate I7





I7-Tb927.03_v5.1











I7-Tb927.07_v5.1











I7-Tb927.11_v5.1



Isolate Keko





KeKo-Tb927.03_v5.1











KeKo-Tb927.07_v5.1

KeKo-Tb927.08_v5.1









KeKo-Tb927.11_v5.1



Isolate LWO07A





LWO07A-Tb927.03_v5.1

LWO07A-Tb927.04_v5.1









LWO07A-Tb927.07_v5.1

LWO07A-Tb927.08_v5.1









LWO07A-Tb927.11_v5.1



Isolate LWO011A





LWO11A-Tb927.03_v5.1

LWO11A-Tb927.04_v5.1









LWO11A-Tb927.07_v5.1

LWO11A-Tb927.08_v5.1









LWO11A-Tb927.11_v5.1



Isolate LWO024A





LWO11A-Tb927.03_v5.1











LWO11A-Tb927.07_v5.1











LWO11A-Tb927.11_v5.1



Isolate LWO030A





LWO30A-Tb927.03_v5.1










LWO30A-Tb927.07_v5.1

LWO30A-Tb927.08_v5.1









LWO30A-Tb927.11_v5.1



Isolate LWO0150A





LWO150A-Tb927.03_v5.1

LWO150A-Tb927.04_v5.1









LWO150A-Tb927.07_v5.1

LWO150A-Tb927.08_v5.1









LWO150A-Tb927.11_v5.1



Isolate Okware





Okware-Tb927.03_v5.1

Okware-Tb927.04_v5.1









Okware-Tb927.07_v5.1











Okware-Tb927.11_v5.1



Isolate STIB348TBABB





STIB348TBABB-Tb927.03_v5.1

STIB348TBABB-Tb927.04_v5.1









STIB348TBABB-Tb927.07_v5.1

STIB348TBABB-Tb927.08_v5.1









STIB348TBABB-Tb927.10_v5.1



Isolate STIB704C





STIB704C-Tb927.03_v5.1

STIB704C-Tb927.04_v5.1









STIB704C-Tb927.07_v5.1

STIB704C-Tb927.08_v5.1









STIB704C-Tb927.11_v5.1



Isolate STIB900





STIB900-Tb927.03_v5.1











STIB900-Tb927.07_v5.1











STIB900-Tb927.11_v5.1



Isolate STIB920





STIB920-Tb927.03_v5.1











STIB920-Tb927.07_v5.1

STIB920-Tb927.08_v5.1









STIB920-Tb927.11_v5.1



Isolate ytat





ytat-Tb927.03_v5.1











ytat-Tb927.07_v5.1

ytat-Tb927.08_v5.1









ytat-Tb927.11_v5.1

