

**Supplementary Figure S3 - Example of Partially Misassembled Contig (PMisCon).** (a) A contig (yellow) on chromosome 1 (a.1) ranging from 94.57 Mb to 94.74 Mb shows high correlation with a segment (green) on chromosome 2 (a.2) position 7.9 - 8.0 Mb (right panel). (b) Although this contig exhibits an expected behavior of LD decay, a closer inspection reveals that the contig can be divided into two parts: a "subcontig" (yellow) with expected LD behavior on chromosome 1 (b.1) and no high correlations with SNPs on chromosome 2 (b.2) and a second (grey) that shows an unexpected behaviour of LD decay on chromosome 1 (b.3) and has high correlation with a segment (green) on chromosome 2 (b.4). (c) Re-location of the grey "subcontig" on chromosome 2 (c.2) corrects LD decay (c.1 and c.2).

