Anatomy of a chimeric junction identified with CRAC algorithm

Chimeric event
Chromosome A and B are translocated together. A chimeric transcript is produced from the fusion of two genes, one from chromosome A and the other from chromosome B.

chimeric read
A read overlapping the chimeric junction.

CRAC k-mer analysis
CRAC procedure to analyse reads relies on the analysis of k-mer profiles.

localization profile
Number of time each k-mer is found on the reference genome.

support profile
Number of time each k-mer is found in the input dataset.

score break length
Measure of distance between the observed break length and the theoretical break length.

score is duplicated
If the k-mer location around the break is ambiguous.

score coefficient variation
Coefficient variation of the support profile.

score_break_length = observed_break_length() / (k - 1) = 1

score_is_duplicate = true

score_coeff_var = std_dev(support[]) / mean(support[])