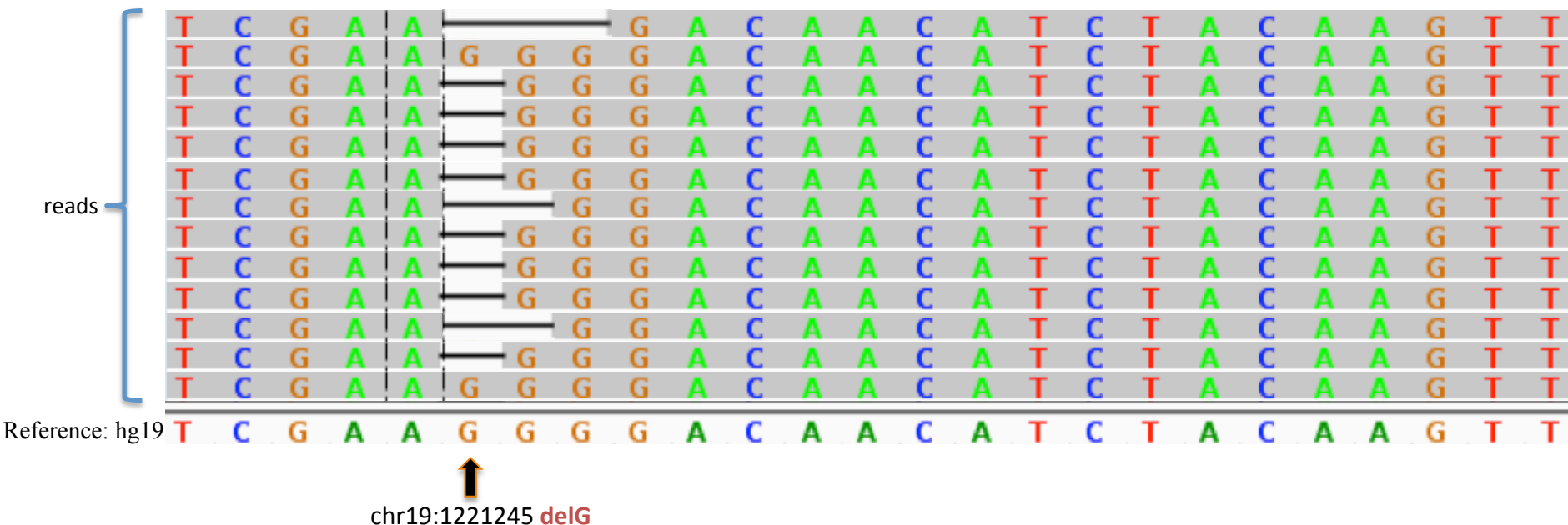


An example of calculating *var* and *frmode*



N = number of reads containing indel (deletion of G in this example) at the indel position (e.g. chr19:1221245) = 11

X = vector of size N containing indel (deletion) lengths = [1,2,1,1,1,2,1,1,1,3]

μ = mean of indel lengths = $(1+2+1+1+1+2+1+1+1+3)/11=1.36$

var = variance of indel length (formula at the bottom right) = 0.41

Mode of distribution of indel lengths = the most common indel(deletion) length at the indel position = 1

frmode of indel lengths = frequency of the most common indel length at that position: in 8 out of 11 reads the most common indel length is 1, therefore *frmode* = $8/11 = 0.73$.

$$\sigma^2 = \frac{\sum (X - \mu)^2}{N}$$