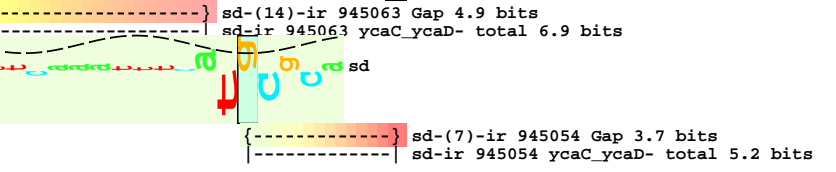piece 1, NC_000913, ycaC_ycaD-, config: linear, direction: -, begin: 945123, end: 944761

```
        *945120    *        *945110    *        *945100    *        *945090    *        *945080    *        *945070    *        *945060    *        *945050    *
5' a a g c a t g a c a g g c t g g g t a t a c g t g g a c a t g a a t t a a a a c c g t g a g g a a g t t c a a a t t t c a t g c g c a t c a t g c c a c c g c c a 3'
   - lys - his - asp - arg - leu - gly - ile - arg - gly - his - glu - leu - lys - pro -   ●   -   -   -   -   -   -   -fMet - arg - ile - met - pro - pro - pro -
     - ser - met - thr - gly - trp - val - tyr - val - asp - met - asn -   ●   -   -   -   -   -   -   -fMet - arg - lys - phe - lys - phe - his - ala - his - his - ala - thr - ala - lys -
       - ala -   ●   -   -   -   -   -   -   -   -
```
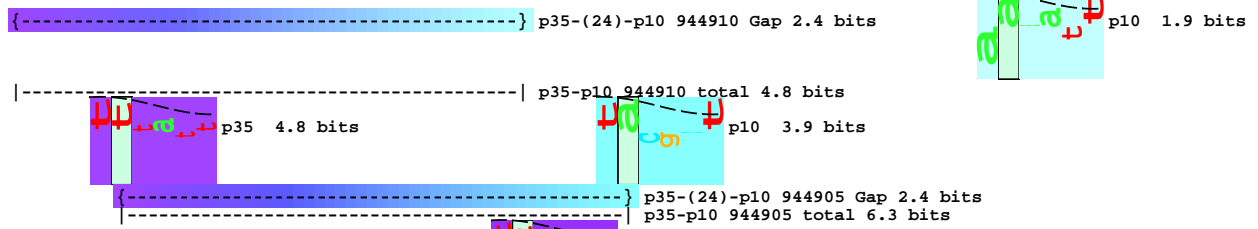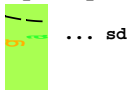
... ---] NC_000913.ycaD

ir ycaC_ycaD-

sd

... ir

sd-(14)-ir 945063 Gap 4.9 bits
sd-ir 945063 ycaC_ycaD- total 6.9 bits

sd

sd-(7)-ir 945054 Gap 3.7 bits
sd-ir 945054 ycaC_ycaD- total 5.2 bits

```
        *945040    *        *945030    *        *945020    *        *945010    *        *945000    *        *944990    *        *944980    *        *944970    *
5' a a a a c a t t g t c a t g g g t g a a a a t a c g c g a t a t c c c a g c g c g g c g g t t a t t a t c g a t t t a t a t t a c t c a t t c a t a a c g c t a a t g 3'
   - lys - thr - leu - ser - met - gly - glu - asn - thr - arg - tyr - pro - ser - gly - gly - ile - ile - asp - leu - tyr - tyr - ser - phe - ile - thr - leu - met -
     -   -   -   -   -fMet - lys - ile - arg - asp - ile - pro - ala - ala - val - leu - ser - ile - tyr - ile - thr - his - ser -   ●   -   -   -   -
       - asn - ile - val - asn - gly -   ●   -
```

p35   5.5 bits

p10   0.9 bits

... ir ycaC_ycaD-

p35-(24)-p10 945011 Gap 2.4 bits
p35-p10 945011 total 4.0 bits

```
        *944960    *        *944950    *        *944940    *        *944930    *        *944920    *        *944910    *        *944900    *        *944890    *
5' c t g a a g a g a t g a t t a g t c t c a t c t g a t t g t t t t t a t t g a a c t a a c a c a a t t t c a t a c g c t t c g t t c a g t c g a a a a t t t c 3'
   - leu - lys - arg -   ●   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -
     -   -   -fMet - ile - ser - leu - ile -   ●   -fMet - phe - leu - leu - asn -   ●   -   -   -   -   -   -   -   -   -
```

[###> orf 38 codons

p35   4.8 bits

p10   2.4 bits

p10   3.8 bits

p35-(24)-p10 944910 Gap 2.4 bits

p10   1.9 bits

p35-p10 944910 total 4.8 bits

p35   4.8 bits

p10   3.9 bits

p35-(24)-p10 944905 Gap 2.4 bits
p35-p10 944905 total 6.3 bits

p35   5.3 bits

p35-(22)-p10 944888 Gap 2.3 bits
p35-p10 944888 total 6.8 bits
p35-(23)-p10 944887 Gap 1.4 bits
p35-p10 944887 total 5.8 bits

```
        *944880    *        *944870    *        *944860    *        *944850    *        *944840    *        *944830    *        *944820    *        *944810    *        *944800
5' a t g g t c a c a g c a a a c t c a t a t t t c c g t c t a t g c t t t c a g a g c a a t g c a a t g c g c t g t g a t t t c a g a c g t a c c a c t g a 3'
   -fMet - val - thr - ala - asn - ser - tyr - phe - pro - ser - met - leu - ser - glu - gln - cys - ile - ala - ser - asp - arg - phe - gln - thr - tyr - his -   ●   -
```
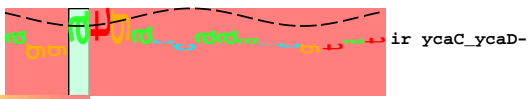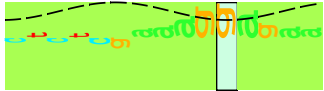
```
                                          -fMet - his - arg - val - ● -                     -           -
                                                                                         ‹-›
                                                                                        sn    ... sd

           *         *944790     *         *944780     *         *944770     *
       5' c t c t c g a a a g g a g a a g a g g a t g a c c a a a c c g t a t g t t c g 3'
                                          -fMet - thr - lys - pro - tyr - val -
                                                   ●
                                                              -fMet - phe -
   ...                                    sd    [---------------------------------- ... NC_000913.ycaC


                                                                                   ir ycaC_ycaD-

       {------------------} sd-(9)-ir 944780 Gap 2.3 bits
       |------------------| sd-ir 944780 ycaC_ycaD- total 13.6 bits
```