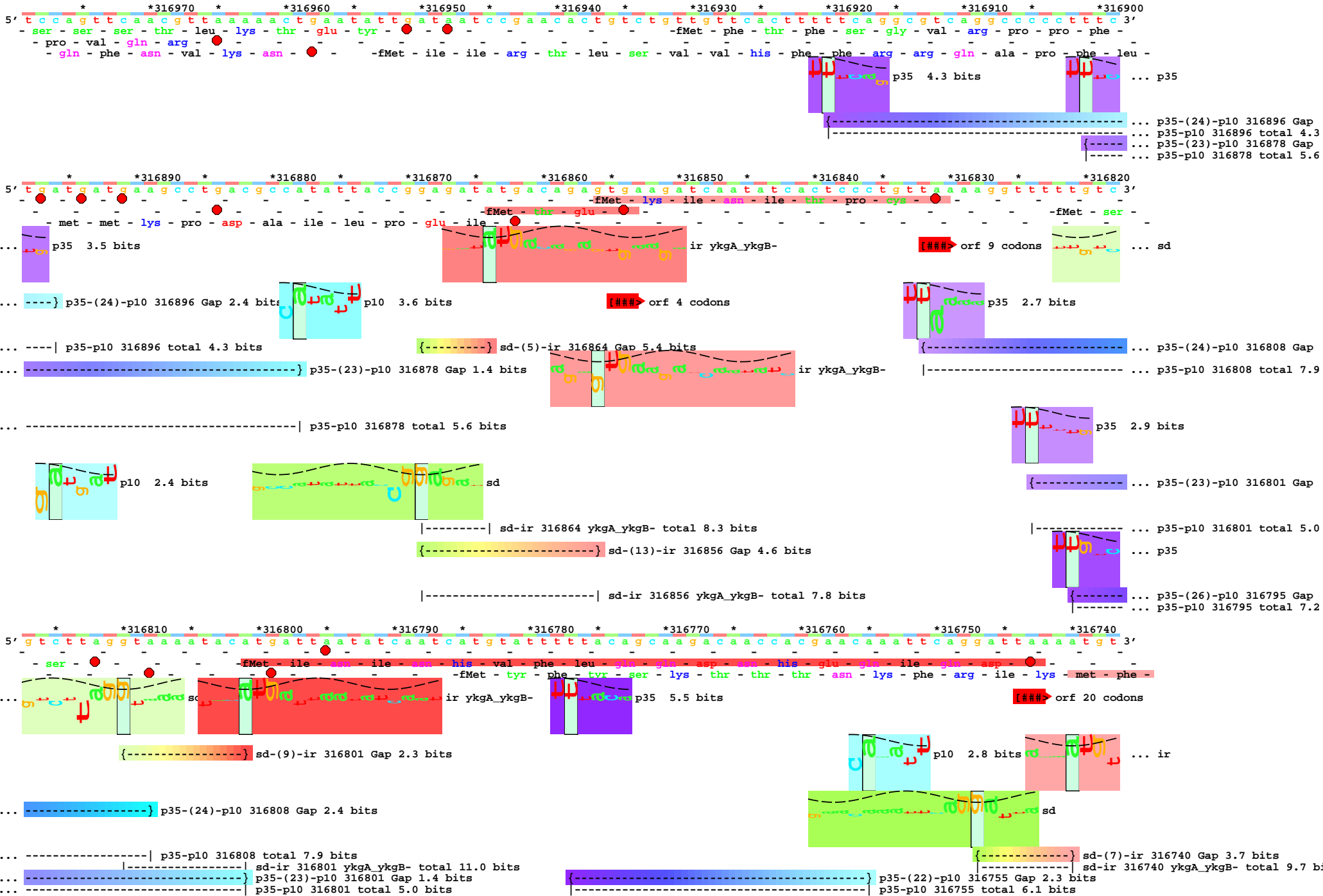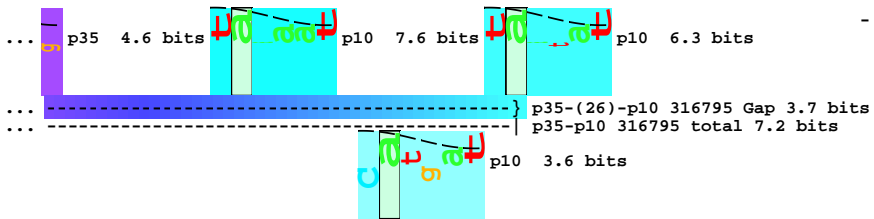piece 1, NC_000913, ykgA_ykgB-, config: linear, direction: -, begin: 316979, end: 316374

```
            *        *316970    *        *316960    *        *316950    *        *316940    *        *316930    *        *316920    *        *316910    *        *316900
5' t c c a g t t c a a c g t t a a a a a c t g a a t a t t g a t a a t c c g a a c a c t g t c t g t t g t t c a c t t t t t c a g g c g t c a g g c c c c c t t t c 3'
   - ser - ser - ser - thr - leu - lys - thr - glu - tyr -    -   -   -   -   -   -   -   -fMet - phe - thr - phe - ser - gly - val - arg - pro - pro - phe -   -
        - pro - val - gln - arg -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -
           - gln - phe - asn - val - lys - asn -   -   -   -fMet - ile - ile - arg - thr - leu - ser - val - val - his - phe - phe - arg - arg - gln - ala - pro - phe - leu -
```

p35 4.3 bits   ... p35

... p35-(24)-p10 316896 Gap
... p35-p10 316896 total 4.3
... p35-(23)-p10 316878 Gap
... p35-p10 316878 total 5.6

```
            *        *316890    *        *316880    *        *316870    *        *316860    *        *316850    *        *316840    *        *316830    *        *316820
5' t g a t g a t g a a g c c t g a c g c c a t a t t a c c g g a g a t a t g a c a g a g t g a a g a t c a a t a t c a c t c c c t g t t a a a a g g t t t t t g t c 3'
```

... met - met - lys - pro - asp - ala - ile - leu - pro - glu - ile -   -fMet - thr - glu -   -   -   -   -   -   -   -   -   -   -   -   -fMet - ser -

p35 3.5 bits   ir ykgA_ykgB-   [###> orf 9 codons   ... sd

... ----} p35-(24)-p10 316896 Gap 2.4 bits   p10 3.6 bits   [###> orf 4 codons   p35 2.7 bits

... ----| p35-p10 316896 total 4.3 bits   {-----} sd-(5)-ir 316864 Gap 5.4 bits   ... p35-(24)-p10 316808 Gap

... ------------------------} p35-(23)-p10 316878 Gap 1.4 bits   ir ykgA_ykgB- |---------------------------- ... p35-p10 316808 total 7.9

... --------------------------------| p35-p10 316878 total 5.6 bits   p35 2.9 bits

p10 2.4 bits   sd   {------------ ... p35-(23)-p10 316801 Gap

|---------| sd-ir 316864 ykgA_ykgB- total 8.3 bits |------------ ... p35-p10 316801 total 5.0

{------------------------} sd-(13)-ir 316856 Gap 4.6 bits   ... p35

|------------------------| sd-ir 316856 ykgA_ykgB- total 7.8 bits   {-------- ... p35-(26)-p10 316795 Gap
|-------- ... p35-p10 316795 total 7.2

```
            *        *316810    *        *316800    *        *316790    *        *316780    *        *316770    *        *316760    *        *316750    *        *316740
5' g t c t t a g g t a a a t a c a t g a t t a a t a t c a a t c a t g t a t t t t t a c a g c a a g a c a a c c a c g a a c a a t t c a g g a t t a a a a t g t 3'
```

- ser -   -   -   -fMet - ile - asn - ile - asn - his - val - phe - leu - gln - gln - asp - asn - his - glu - gln - ile - gln - asp -   -   met - phe -
                    -fMet - tyr - phe - tyr - ser - lys - thr - thr - thr - asn - lys - phe - arg - ile - lys -

... sd   ir ykgA_ykgB-   p35 5.5 bits   [###> orf 20 codons

{------------} sd-(9)-ir 316801 Gap 2.3 bits   p10 2.8 bits   ... ir

... ------------} p35-(24)-p10 316808 Gap 2.4 bits   sd

... -----------------| p35-p10 316808 total 7.9 bits   {-------} sd-(7)-ir 316740 Gap 3.7 bits
   |-------------| sd-ir 316801 ykgA_ykgB- total 11.0 bits |------------- | sd-ir 316740 ykgA_ykgB- total 9.7 bi
... ------------------------} p35-(23)-p10 316801 Gap 1.4 bits   {----------------------------------} p35-(22)-p10 316755 Gap 2.3 bits
... -------------------------| p35-p10 316801 total 5.0 bits |----------------------------------| p35-p10 316755 total 6.1 bits

p35 4.6 bits   p10 7.6 bits   p10 6.3 bits

p35-(26)-p10 316795 Gap 3.7 bits
p35-p10 316795 total 7.2 bits

p10 3.6 bits

```
      *     *316730  *     *316720  *     *316710  *     *316700  *     *316690  *     *316680  *     *316670  *     *316660
5' tttaccgactccccaacataaacccaaatcaagcgaactaatttgtgccatttctttatctgtcagtgagaaatcgatttt 3'
   -   -   -   -   -   -   -   -   -   -   -   -   -   -   - -fMet - pro - phe - leu - tyr - leu - ser - val - arg - asn - arg - phe - leu -
      tyr - arg - leu - pro - asn - ile - thr - gln - ile - lys - arg - thr - asn - leu - cys - his - phe - phe - ile - cys - gln -
                                                                                          [###> orf 24 codons
```

... ir ykgA_ykgB-
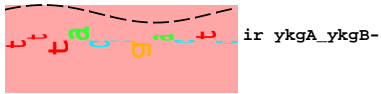
```
      *     *316650  *     *316640  *     *316630  *     *316620  *     *316610  *     *316600  *     *316590  *     *316580  *
5' gatggcatctgcaatactctgaagcagactatacggaaaattccactgtcagtccctccattaggcatgaacaatgagtc 3'
   - met - gly - ile - cys - asn - thr - leu - lys - gln - thr - ile - arg - lys - ile - pro - leu - ser - val - pro - pro - leu - gly - met - asn - asn - glu - ser -
                                                                                              -fMet - ser - leu -
```

... ir

sd

sd-(9)-ir 316581 Gap 2.3 bits
sd-ir 316581 ykgA_ykgB- total 5.7 bits

```
      *     *316570  *     *316560  *     *316550  *     *316540  *     *316530  *     *316520  *     *316510  *     *316500  *
5' tacgttaaaacgtaacctcaaagtagtatgtggattttgatatcacttatgcaaaaaattcattaataatgtaggactgaa 3'
   - thr - leu - lys - arg - asn - leu - lys - val - val - cys - gly - phe - -fMet - trp - ile - leu - ile - ser - leu - met - gln - lys - ile - his - -   -   -   -   -   -
      arg - -   -   -   -   -   -   -   -fMet - asp - phe - asp - ile - thr - tyr - ala - lys - asn - ser - leu - ile - met - -   -   -   -
```

... ir ykgA_ykgB-   sd   ir ykgA_ykgB-
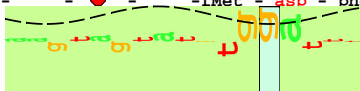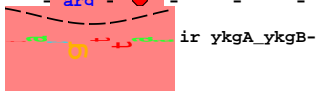
[###> orf 5 codons   p35 3.6 bits   [###> orf 6 codons

sd-(16)-ir 316526 Gap 6.4 bits
sd-ir 316526 ykgA_ykgB- total 8.8 bits

p35 5.6 bits   p10 3.8 bits

p35-(23)-p10 316520 Gap 1.4 bits
p35-p10 316520 total 6.0 bits

p10 1.2 bits

p35-(22)-p10 316515 Gap 2.3 bits
p35-p10 316515 total 4.4 bits

```
      *     *316490  *     *316480  *     *316470  *     *316460  *     *316450  *     *316440  *     *316430  *     *316420  *
5' acctctctattttcggggacaacgaagcagacgctaccagtgcttttgccttcgcccttgctattttgatacacttaggg 3'
   -   -   -   -   -   -   -   -   -   - -fMet - leu - leu - pro - ser - pro - leu - leu - phe - leu - ile - his - leu - gly -
   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -
```

p35 6.2 bits   ... sd

p10   5.8 bits

p35-(25)-p10 316422 Gap 4.0 bits
p35-p10 316422 total 8.0 bits
p35   5.6 bits

... p35-(22)-p10 316404 Gap
... p35-p10 316404 total 7.3

```
        *316410      *        *316400      *        *316390      *        *316380      *
5'  c c c a g g g t a t a a c g a a a a t g t g c g a t a t g a c a a a g a a t t  3'
    -  pro  -  arg  -  val  -  ●  -    -    -    -    -    -    -    -    -    -    -
                                      -fMet -  arg  -  tyr  -  asp  -  lys  -  glu  -
                                      -fMet -  cys  -  asp  -  met  -  thr  -  lys  -  asn  -
```

... sd

ir ykgA_ykgB-

sd-(11)-ir 316395 Gap 3.0 bits
sd-ir 316395 ykgA_ykgB- total 5.8 bits

p10   4.1 bits

... } p35-(22)-p10 316404 Gap 2.3 bits
... | p35-p10 316404 total 7.3 bits