piece 1, NC_000913, yhcC_gltB-, config: linear, direction: -, begin: 3352683, end: 3352053

```
        *3352680  *      *3352670  *      *3352660  *      *3352650  *      *3352640  *      *3352630  *      *3352620  *      *3352610  *
5' aagagcgtggcgacggggtttgcgtgtcatacgcgcgcctcgcattcgcgccccttgttgtcctttcgcatcggttaatac 3'
   - lys - ser - val - ala - thr - gly - phe - ala - cys - his - thr - arg - ala - ser - his - ser - pro - cys - cys - pro - phe - arg - ile - gly -   -   -
   - arg - ala - trp - arg - arg - gly - leu - arg - val - ile - arg - ala - pro - arg - ile - arg - pro - leu - val - val - leu - phe - ala - ser - val - asn - thr -
   - glu - arg - gly - asp - gly - val - cys - val - ser - tyr - ala - arg - leu - ala - phe - ala - pro - leu - leu - ser - phe - ser - his - arg - leu - ile - arg -
...  ------------------------------------------------------] NC_000913.gltB
                                                                                         p35  4.1 bits                                    ... p10
                                                          {·····························} p35-(22)-p10 3352604 Gap 2.3 bit
                                                          |----------------------------| p35-p10 3352604 total 4.3 bits

        *3352600  *      *3352590  *      *3352580  *      *3352570  *      *3352560  *      *3352550  *      *3352540  *      *3352530  *
5' ggtgaagagggatctcaattactgcataaatatgatgagcaggctgctcatccagaaagcttccagcggattccactt 3'
   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -
   - val - lys - arg - gly - ser - gln - leu - leu - his - lys - tyr - asp - glu - gln - ala - ala - his - pro - glu - ser - phe - gln - arg - ile - ser - asn - leu -
                                                                     -fMet - met - ser - arg - leu - leu - ile - gln - lys - ala - ser - ser - gly - phe - pro - thr - tyr -
...  p10  2.5 bits

        *3352520  *      *3352510  *      *3352500  *      *3352490  *      *3352480  *      *3352470  *      *3352460  *      *3352450  *
5' atcgggaaagctgatacaggtcaaatggcaagcttattggtacagaaatgtgcttagcgcaaaattctttattaaatgac 3'
                    -fMet - ala - ser - leu - leu - val - gln - lys - cys - ala - leu - ala - gln - asn - ser - leu - leu - asn - asp -
   - ser - gly - lys - leu - ile - gln - val - lys - trp - gln - ala - tyr - trp - tyr - arg - asn - val - leu -   -   -   -   -   -fMet - thr -
   - arg - glu - ser -   -   -   -   -   -   -   -   -   -   -fMet - cys - phe - ser - ala - lys - phe - phe - ile - lys -   -   -
                                                      p35  2.0 bits                                                      ... sd
                                                                                         p10  4.7 bits                    ... p35
                                                      {····························] p35-(23)-p10 3352460 Gap 1.4 bits
                                                      |----------------------------| p35-p10 3352460 total 5.3 bits {-------- ... p35-(23)-p10 3352421 Gap
                                                                                          p35  1.4 bits |------- ... p35-p10 3352421 total 6.4
                                                                                     {··························] p35-(23)-p10 3352433 Gap
                                                                                     |---------------------------- ... p35-p10 3352433 total 7.5

        *3352440  *      *3352430  *      *3352420  *      *3352410  *      *3352400  *      *3352390  *      *3352380  *      *3352370  *      *3352360
5' tgaaattaaaatggatttatctttaaggctaaaagggaagtcgttagagaaacagtcaattcctgactgtcataaaggtg 3'
   - glu - ile - lys - met - asp - phe - ile - phe - lys - ala - lys - arg - glu - val - val - arg - glu - thr - val - asn - ser -   -   -   -   -fMet -
                                                                                                                                       -fMet -
...  scm          ir yhcC_gltB-                                                                          [###> orf 19 codons
...  p35  3.4 bits                 p10  4.5 bits                                                          p35  3.2 bits
   {-----------} sd-(9)-ir 3352430 Gap 2.3 bits                                                          {----------------- ... p35-(23)-p10 3352348 Gap
...  {-------------------->} p35-(23)-p10 3352421 Gap 1.4 bits                                            |----------------- ... p35-p10 3352348 total 7.0
...  |---------------------- p35-p10 3352421 total 6.4 bits
...  {---------->} p35-(23)-p10 3352433 Gap 1.4 bits
...  |----------| p35-p10 3352433 total 7.5 bits
   |----------| sd-ir 3352430 yhcC_gltB- total 8.7 bits
                p10  7.6 bits

              *      *3352350  *      *3352340  *      *3352330  *      *3352320  *      *3352310  *      *3352300  *      *3352290  *      *3352280
5' tgttaaccttatcctgccttgaactgacgacaaaaccagcattttatactgccttaattggtaatgacgtttcatgctac 3'
   - cys -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -fMet - val - met - thr - phe - his - ala - thr -
               -fMet - asn -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -
```
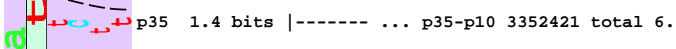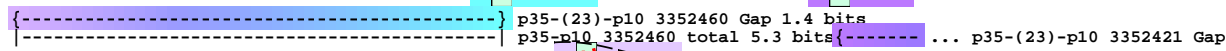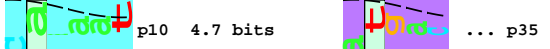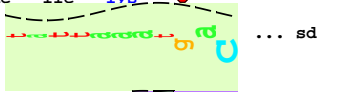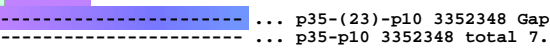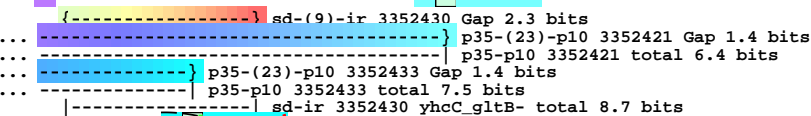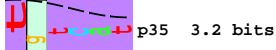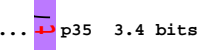
- leu - thr - leu - ile - leu - pro - ● - - - - - - - - 2 - - - - - - - ● - ● - - - -fMet - leu - leu -

p10   5.2 bits   p10   2.3 bits   p35   5.3 bits

p35   5.0 bits   p10   3.2 bits   {------------------- ... p35-(21)-p10 3352267 Gap

... {------------------} p35-(23)-p10 3352348 Gap 1.4 bits   p10   7.3 bits |------------------- ... p35-p10 3352267 total 9.6

... ----------------------| p35-p10 3352348 total 7.0 bits

{-----------------------------} p35-(21)-p10 3352318 Gap 3.3 bits
|-----------------------------| p35-p10 3352318 total 4.0 bits
{-----------------------------} p35-(23)-p10 3352316 Gap 1.4 bits
|-----------------------------| p35-p10 3352316 total 6.7 bits
{-----------------------------} p35-(26)-p10 3352313 Gap 3.7 bits
|-----------------------------| p35-p10 3352313 total 8.6 bits

       *   *3352270 *   *3352260 *   *3352250 *   *3352240 *   *3352230 *   *3352220 *   *3352210 *   *3352200
5' t g t t t t g c c t a a a a t c c a t c a g g a g a t a a a a a a a t c t g a c a c a a g a t a a g c a a a a g t g a t t t a t g t g a t t a t g c a t g a a a 3'
                                      -     -   -   -   ●   -   -   -   -   -   ●   -   -   -   ●   -fMet -   -   -   -fMet -
        - val - phe - ala -   ●   -   -   -   -   -   -   -   -   -   -   -   -   -   -fMet -   -   - lys -
        - phe - leu - pro - lys - ile - his - gln - glu - ile - lys - lys - ser - asp - thr - arg -   -fMet - ile - tyr - val - ile - met - his - glu - ile -

                      p10   7.6 bits   sd   -fMet - ile - tyr - val - ile - met - his - glu - ile -   ir yhcC_gltB-

... {------------------} p35-(21)-p10 3352267 Gap 3.3 bits   p10   3.8 bits   {------------------} sd-(11)-ir 3352222 Gap 3.0 bits   p35   3.3 bits

... ----------------------| p35-p10 3352267 total 9.6 bits |------------------| sd-ir 3352222 yhcC_gltB- total 6.5 bits

p35   6.2 bits   ir yhcC_gltB-

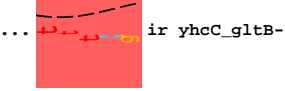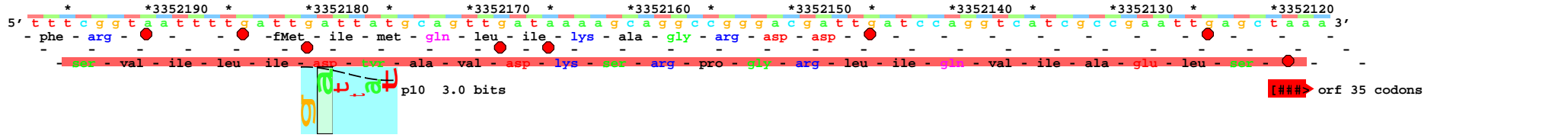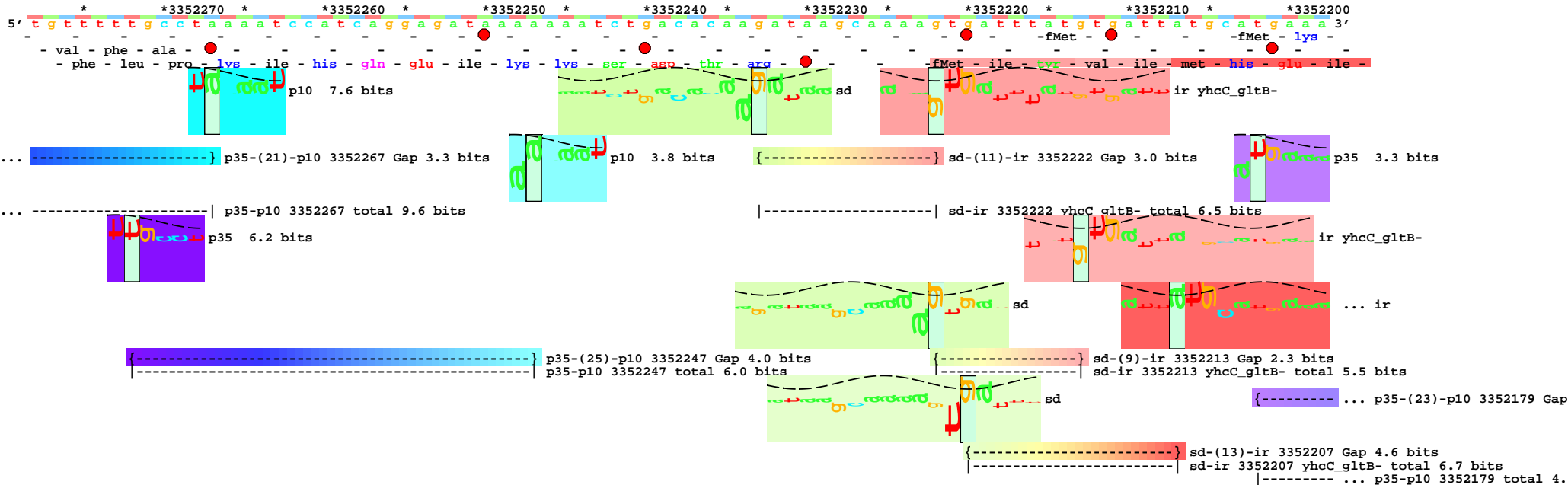   sd   ... ir

{-----------------------------} p35-(25)-p10 3352247 Gap 4.0 bits   {----------} sd-(9)-ir 3352213 Gap 2.3 bits
|-----------------------------| p35-p10 3352247 total 6.0 bits |----------| sd-ir 3352213 yhcC_gltB- total 5.5 bits
                                                                                          {---------- ... p35-(23)-p10 3352179 Gap
                                                                      sd
                                                          {------------------} sd-(13)-ir 3352207 Gap 4.6 bits
                                                          |------------------| sd-ir 3352207 yhcC_gltB- total 6.7 bits
                                                                              |-------- ... p35-p10 3352179 total 4.9

       *   *3352190 *   *3352180 *   *3352170 *   *3352160 *   *3352150 *   *3352140 *   *3352130 *   *3352120
5' t t t c g g t a a t t t t g a t t g a t t a t g c a g t t g a t a a a a g c a g g c c g g g a c g a t t g a t c c a g g t c a t c g c c g a a t t g a g c t a a a 3'
        - phe - arg -   ●   -   -   ●   -fMet - ile - met - gln - leu - ile -   ●   - lys - ala - gly - arg - asp - asp -   ●   -   -   -   -   -   -   ●   -
        - ser - val - ile - leu - ile - asp - tyr - ala - val - asp - lys - ser - arg - pro - gly - arg - leu - ile - gln - val - ile - ala - glu - leu - ser -   ●   -   -

                              p10   3.0 bits

                                                                                                                          [###> orf 35 codons

... ir yhcC_gltB-

```
...  ⌐-------------------------------→} p35-(23)-p10 3352179 Gap 1.4 bits

...  -------------------------------| p35-p10 3352179 total 4.9 bits

       *      *3352110  *      *3352100  *      *3352090  *      *3352080  *      *3352070  *      *3352060  *
5'  a a t g g c a g g c t t t g g c c t c t t t t c a a g g c g c g g t c t a t c a g a t t a t g c a g t t a c a g a a t t a g t  3'
     -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   - ●  -
    -fMet - ala - gly - phe - gly - leu - phe - ser - arg - arg - gly - leu - ser - asp - tyr - ala - val - thr - glu - ile - ser -
        -       -       -   -fMet - ala - ser - phe - gln - gly - ala - val - tyr - gln - ile - met - gln - leu - gln - lys - leu -
```
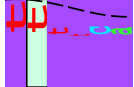
p35   4.6 bits

[--------------------------------------- ... NC_000913.yhcC
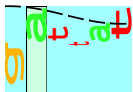
p10   3.0 bits

```
{⌐-----------------------------------→} p35-(21)-p10 3352075 Gap 3.3 bits
|-------------------------------------| p35-p10 3352075 total 4.4 bits
```