- 1 -

piece 1, NC_000913, ycfQ_ycfR+, config: linear, direction: +, begin: 1168026, end: 1168315
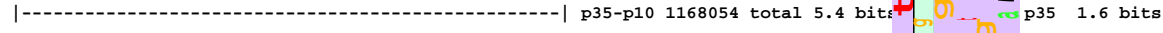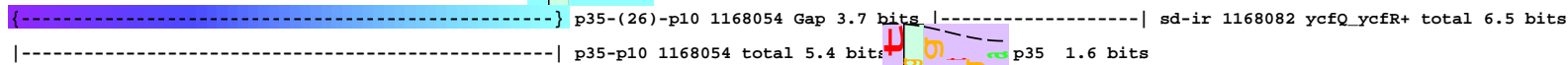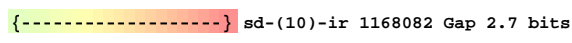
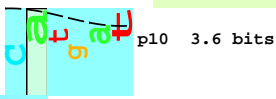```
          *1168030 *   *1168040 *   *1168050 *   *1168060 *   *1168070 *   *1168080 *   *1168090 *   *1168100 *
5' ttttacacattgtgttgagtcagttgccatgatgccgttgtacctggtgactgtgaatgaaaggttattataaaaataatc 3'
   - phe - tyr - thr - leu - cys - val - glu - ser - val - ala - met - met - pro - leu - tyr - leu - val - thr - val - asn - glu - arg - leu - leu - ● - ● - -
   - leu - his - ile - val - leu - ser - gln - leu - pro - ● - - - - - - - ● - -fMet - lys - gly - tyr - tyr - lys - asn - asn - his -
... ---] NC_000913.ycfQ   ir ycfQ_ycfR+
```

p35   5.5 bits

sd

p10   7.1 bits

p10   3.6 bits          {------------------} sd-(10)-ir 1168082 Gap 2.7 bits

{--------------------------------------------} p35-(26)-p10 1168054 Gap 3.7 bits  |-----------------| sd-ir 1168082 ycfQ_ycfR+ total 6.5 bits

|---------------------------------------------| p35-p10 1168054 total 5.4 bits          p35   1.6 bits

{-------------------------------------} p35-(21)-p10 1168092 Gap 3.3 bits
|-------------------------------------| p35-p10 1168092 total 5.4 bits
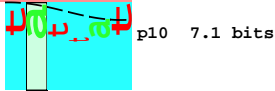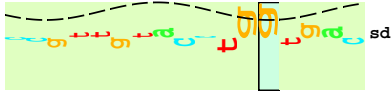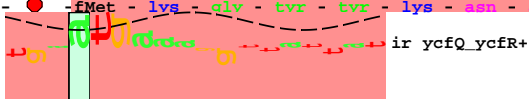
```
          *1168110  *       *1168120  *       *1168130  *       *1168140  *       *1168150  *       *1168160  *       *1168170  *       *1168180  *
5' acctccgttcaccagtccagatcccataaaaataattgctttctattaactgaaatttaaagatttttaaattaattaat 3'
   - leu - arg - ser - pro - val - gln - ile - pro - ● - - - ● - -fMet - leu - ser - ile - ● - - - - - - - ● - -fMet - -
                                         [###> orf 18 codons                              sd                              ... ir
```

p35   5.3 bits   {--------------------------------} sd-(17)-ir 1168186 Gap 6.5 bits

p35   4.4 bits |--------------------------------| sd-ir 1168186 ycfQ_ycfR+ total 7

p35   4.1 bits   p10   1.9 bits   ... p10

{-----------------------------------} p35-(24)-p10 1168167 Gap 2.4 bits
|-----------------------------------| p35-p10 1168167 total 4.8 bits

p10   1.1 bits

{-------------------------------} p35-(23)-p10 1168170 Gap 1.4 bits
|-------------------------------| p35-p10 1168170 total 4.1 bits

p10   3.7 bits

{---------------------------------} p35-(22)-p10 1168175 Gap 2.3 bits
|---------------------------------| p35-p10 1168175 total 5.5 bits

p10   5.7 bits

{---------------------------------} p35-(23)-p10 1168176 Gap 1.4 bits
|---------------------------------| p35-p10 1168176 total 8.4 bits

p35   5.6 bits

p35-(22)-p10 1168186 Gap 2.3 bit
p35-p10 1168186 total 5.9 bits

p35 5.6 bits

... p35-(25)-p10 1168199 Gap
... p35-p10 1168199 total 5.4

```
      *1168190   *        *1168200   *        *1168210   *        *1168220   *        *1168230   *        *1168240   *        *1168250   *        *1168260   *
5' gattgttataaaaaatatcttgtatgtgatccagatcacatctatcatttagttatcgatcgttaagtaattgcttgcgac 3'
```

- ile - val - ile - lys - asn - ile - leu - cys - val - ile - gln - ile - thr - ... - ile - ile - ... - -fMet - leu - ala - thr -
-fMet - leu - ... -fMet - ... -fMet - arg - arg -

... ir ycfQ_ycfR+

[###> orf 18 codons

p35 5.3 bits

p10 3.8 bits

p10 6.3 bits

p35 5.7 bits

{-------------------} ... p35-(23)-p10 1168282 Gap

... p10 2.7 bits

|------------------- ... p35-p10 1168282 total 4.3

{--} p35-(23)-p10 1168231 Gap 1.4 bits

|--| p35-p10 1168231 total 10.5 bits

... {-------------------} p35-(25)-p10 1168199 Gap 4.0 bits
... |-------------------| p35-p10 1168199 total 5.4 bits

```
      *1168270   *        *1168280   *        *1168290   *        *1168300   *        *1168310   *
5' gtcattcatctgcataaggccactattatgaaaaacgtaaaaaccct 3'
```

-fMet - lys - asn - val - lys - thr -
- ser - phe - ile - cys - ile - arg - pro - leu - leu -
- his - ser - ser - ala -

sd   [------------------------------------- ... NC_000913.ycfR

ir ycfQ_ycfR+

... {------------------------} p35-(23)-p10 1168282 Gap 1.4 bits
... |------------------------| p35-p10 1168282 total 4.3 bits

{-------------------} sd-(9)-ir 1168296 Gap 2.3 bits
|-------------------| sd-ir 1168296 ycfQ_ycfR+ total 12.5 bits

p10 0.4 bits