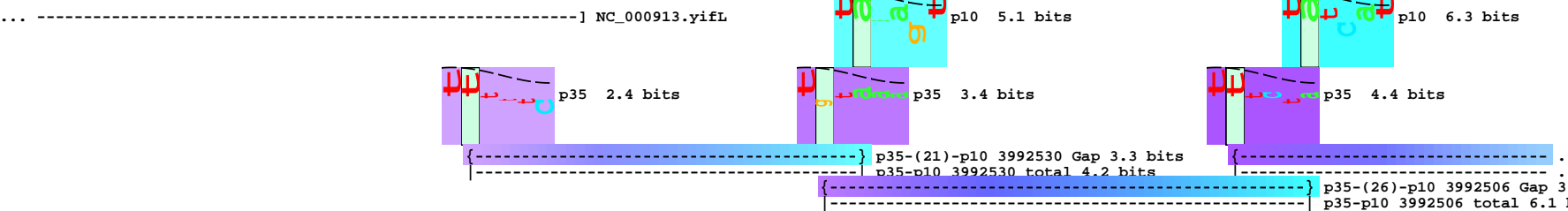piece 1, NC_000913, cyaY_yifL-, config: linear, direction: -, begin: 3992574, end: 3992063

```
         *3992570  *      *3992560  *      *3992550  *      *3992540  *      *3992530  *      *3992520  *      *3992510  *      *3992500  *
5' t a c a g t g a g t g c c t t a a a c a c g t t t t t c a t t a t g g a t t g c c t g t a a a g t t c a t c g c t t t c t g c t t t c t a t c a t c g c a g g a g 3'
   - tyr - ser - glu - cys - leu - lys - his - val - phe - his - tyr - gly - leu - pro - val -●lys - phe - ile - ala - phe - cys - phe - leu - ser - ser - gln - glu -
     - thr - val - ser - ala - leu - asn - thr - phe - phe - ile - met - asp - cys - leu -    -     -     -     -     -     -     -     -     -     -     -     -
       - gln -●-fMet - pro -●    -     -     -     -     -     -     -     -     -     -     -
```

... ---] NC_000913.yifL

p10   5.1 bits
p10   6.3 bits
p35   2.4 bits
p35   3.4 bits
p35   4.4 bits

{------------------------------------} p35-(21)-p10 3992530 Gap 3.3 bits
|------------------------------------| p35-p10 3992530 total 4.2 bits

{------------------------------} ... p35-(24)-p10 3992486 Gap
|------------------------------| ... p35-p10 3992486 total 4.5
{---------------------} p35-(26)-p10 3992506 Gap 3.7 bits
|---------------------| p35-p10 3992506 total 6.1 bits
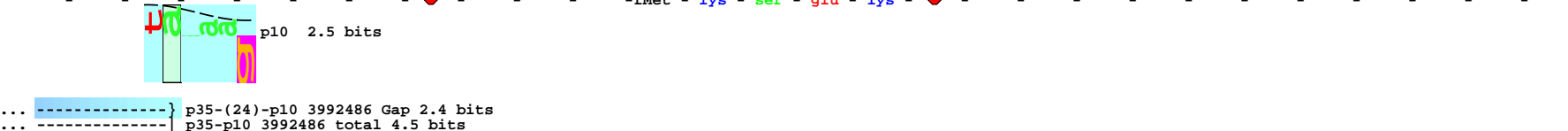
```
         *3992490  *      *3992480  *      *3992470  *      *3992460  *      *3992450  *      *3992440  *      *3992430  *      *3992420  *
5' a a g a c g t a a a g c a a g c t t a g c g a c t c t t t a t g a a g t c t g a a a g t g a g g a a a t g c t g c g a t g t a a a c g c t t a c t c g t g 3'
   - lys - thr -●   -     -     -     -     -     -     -     -     -     - ●   -     -     -     - -fMet - leu - arg - val -●   -     - -fMet -
     -     -     -     -     -     - ●   -     -     -     - ●   -     - -fMet - arg - lys - cys - cys - glu - tyr - asn - ala - tyr - ser - trp -
       -     -     -     -     -     -     -   -fMet - lys - ser - glu - lys -●   -     -     -     -     -     -     -     -     -     -     -
```

p10   2.5 bits

... {------------------} p35-(24)-p10 3992486 Gap 2.4 bits
... |------------------| p35-p10 3992486 total 4.5 bits
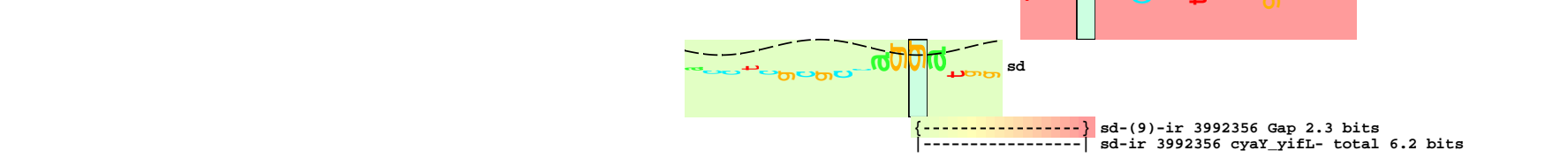
```
         *3992410  *      *3992400  *      *3992390  *      *3992380  *      *3992370  *      *3992360  *      *3992350  *      *3992340  *
5' g g g a t t t a t g t t t t g c t g g t a g t t t c g t g a t c g g c a c c t g c g c c a g g a t g g c t t t a t g c a c t a t c g c a a t g t g g t t t g t t 3'
   - gly - ile - tyr - val - leu - leu - val - val - ser -●   -     -     -     -     -     - -fMet - ala - leu - cys - thr - ile - ala - met - trp - phe - val -
     - gly - phe - met - phe - cys - trp -●   -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     - -fMet - phe -
       -     -     -     -     -   -fMet - ile - gly - thr - ser - arg - gln - asp - gly - phe - met - his - tyr - arg - asn - val - val - cys - leu -
```

ir cyaY_yifL-

sd

{------------------} sd-(9)-ir 3992356 Gap 2.3 bits
|------------------| sd-ir 3992356 cyaY_yifL- total 6.2 bits

```
         *3992330  *      *3992320  *      *3992310  *      *3992300  *      *3992290  *      *3992280  *      *3992270  *      *3992260  *
5' t g t t g t c t t t t t a g t t c c g t c a g c g t g a g g a t g c t c g c t c g g t a a a c c t g a t c a t a a t g t t t a c c a g a a c a g g g a a a g a 3'
   - cys - cys - leu - phe -●   -     -     -     -     - arg - met - leu - ala - arg -●   -     -     -     - -fMet - phe - thr - arg - asn - arg - glu - arg -
     - val - val - phe - phe - ser - ser - val - ser - val -●   -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -
       - leu - ser - phe - leu - val - pro - ser - ala -●   -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -
```

[###]> orf 18 codons
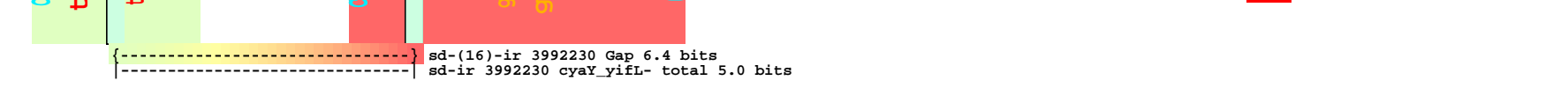
... sd

```
         *3992250  *      *3992240  *      *3992230  *      *3992220  *      *3992210  *      *3992200  *      *3992190  *      *3992180  *      *3992170
5' c g t g g t g t a a c t g c g c c t a a t g a a g a c a a t c t t t c g c t a c a c a g a g a c a t c a t t a t t c c g g t g a c g g a t g a a t c g t g 3'
   - arg - gly - val - thr - ala - pro -●   -●   -     -     -     -     -     -     -     -     -     -     - -fMet - thr - asp - glu - ser - cys - -fMet -
     - -fMet - val -●   -     -     -     -     -     -     -     -     -     -     -     - -fMet - -     -     -     -     -     -     -     -     -
       -     -     -   -fMet - lys - arg - gln - ile - phe - arg - tyr - thr - glu - thr - ser - leu - phe - arg -●   -     -     - -fMet - asn - arg - ala -
```

sd
ir cyaY_yifL-
[###]> orf 16 codons

... {------------------------------} sd-(16)-ir 3992230 Gap 6.4 bits
... |------------------------------| sd-ir 3992230 cyaY_yifL- total 5.0 bits
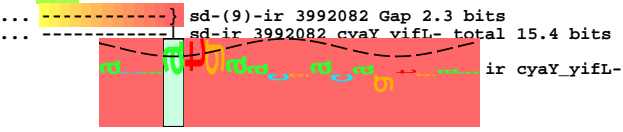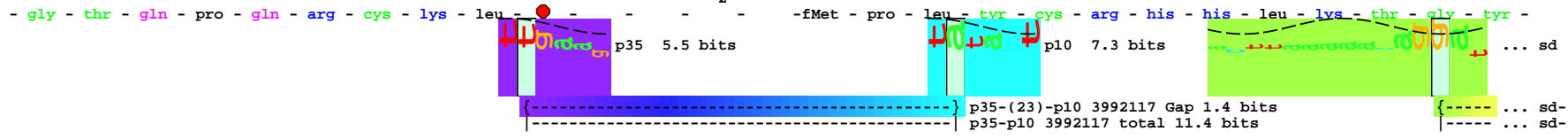
```
      *      *3992160  *      *3992150  *      *3992140  *      *3992130  *      *3992120  *      *3992110  *      *3992100  *      *3992090
5' c c g g a a c g c a g c g c a g a g t c a g c a a a c t t t g a a g c c c t g a c c g c t a c t a c g c c g c c a t c a c t t a a a a a c a g g a t 3'
   - pro - glu - arg - ser - arg - arg - gly - ala - asn - phe - glu - ala - leu - thr - pro - cys - arg - tyr - thr - ala - ala - ile - thr -●   -     -
     - arg - asn - ala - ala - ala - glu - val - gln - thr - leu - lys - pro -●   -     -     -     -     -     -     -     -     -     -     -
```

- gly - thr - gln - pro - gln - arg - cys - lys - leu - - - - - -fMet - pro - leu - tyr - cys - arg - his - his - leu - lys - thr - gly - tyr -

p35   5.5 bits   p10   7.3 bits   ... sd

{-------------------------------------} p35-(23)-p10 3992117 Gap 1.4 bits   {----- ... sd-(9)-ir 3992082 Gap
|-------------------------------------| p35-p10 3992117 total 11.4 bits |----- ... sd-ir 3992082 cyaY_yifL-

*   *3992080   *   *3992070   *
5' acaacaatgaacgacagtgaatttca 3'
 -      -   -fMet - asn - asp - ser - glu - phe -
 -      -   -   -   -fMet - asn - phe -
 - asn - asn - glu - arg - gln - -   -

... sd   [------------------------------------- ... NC_000913.cyaY

... ------------} sd-(9)-ir 3992082 Gap 2.3 bits
... ------------| sd-ir 3992082 cyaY_yifL- total 15.4 bits
ir cyaY_yifL-