piece 1, NC_000913, aqpZ_ybjD+, config: linear, direction: +, begin: 915241, end: 915715
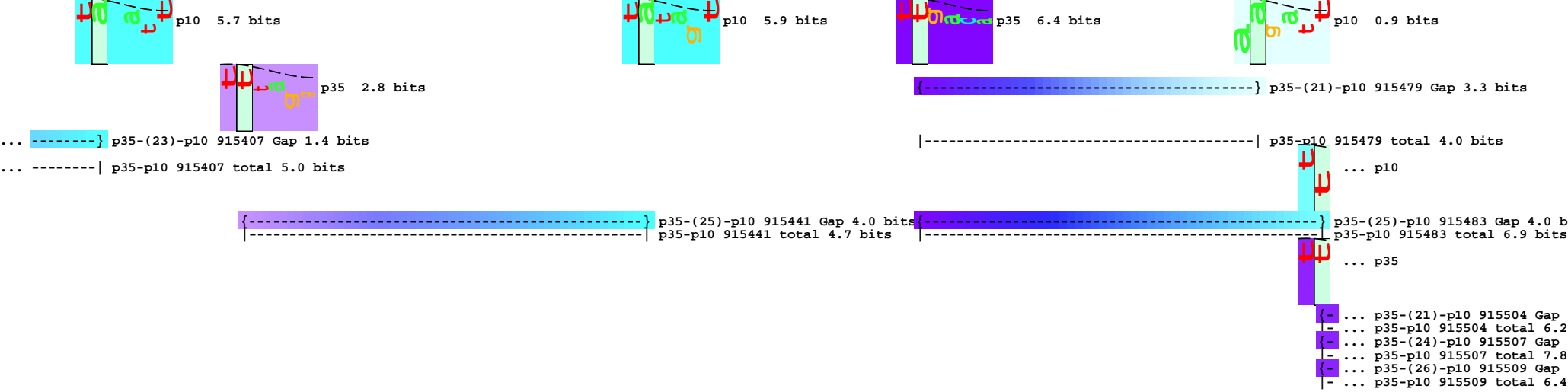
```
             *      *915250     *      *915260     *      *915270     *      *915280     *      *915290     *      *915300     *      *915310     *      *915320
5' aaaacattcagctgctaatttctgaacatatccaccacaattaaaaattgacctgtgaaaaatatggtcgtttataggg 3'
     -  lys - thr - phe - ser - cys -       -   -   -   -   -   -   -   -   -   -   -   -   - -fMet - thr - leu -   -   -   -   -   -   -   -   -
     -  lys - his - ser - ala - ala - asn - phe - leu - asn - ile - ser - thr - thr - ile - lys - asn -   -   -   -   -   -   -   -   -
        - asn - ile - gln - leu - leu - ile - phe -       -   -   -   -   -   -   -   -   - -fMet - lys - asn - met - val - val - leu -       -   -
... ----------------------------------------------------] NC_000913.aqpZ
```
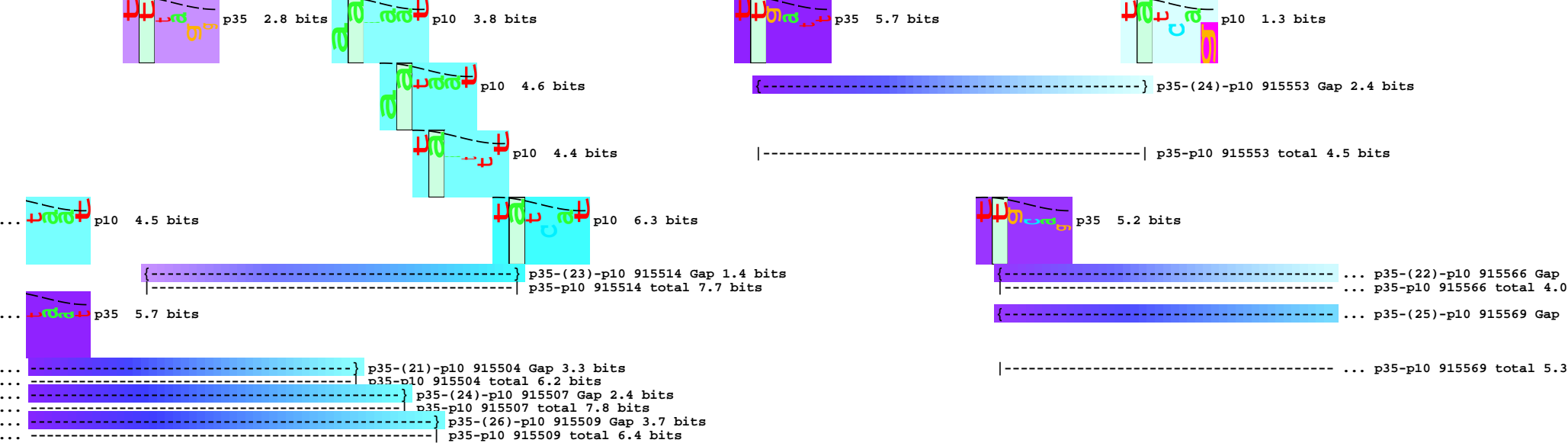
p10 3.8 bits

p10 3.9 bits

p35 3.5 bits

p35 2.7 bits

p10 3.2 bits

{---} p35-(24)-p10 915285 Gap 2.4 bits
|---| p35-p10 915285 total 4.9 bits

{--} p35-(23)-p10 915306 Gap 1.4 bits
|--| p35-p10 915306 total 5.2 bits

p35 5.0 bits

{-------------------------------------} p35-(24)-p10 915314 Gap 2.4 bits
|-------------------------------------| p35-p10 915314 total 5.7 bits
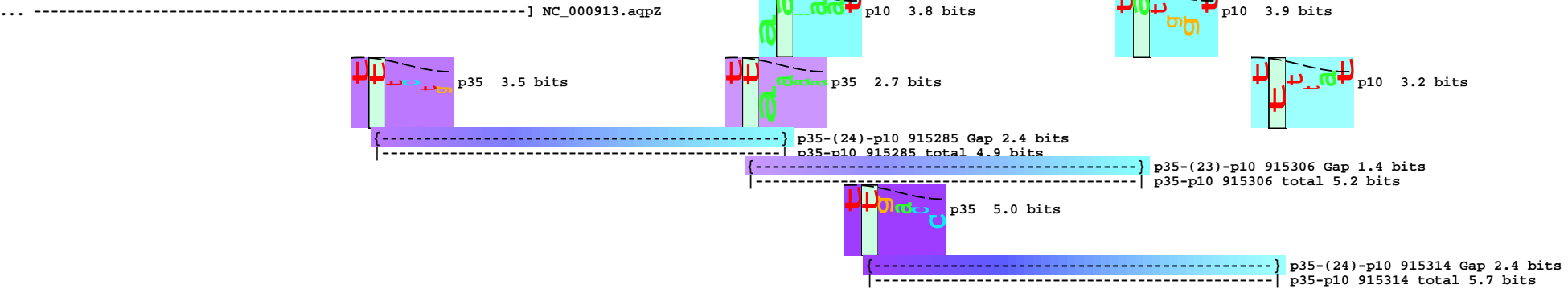
```
             *      *915330     *      *915340     *      *915350     *      *915360     *      *915370     *      *915380     *      *915390     *      *915400
5' gtcgtcgtaaaaaagtgacgacggaaataatgcgcggctattttaaaaacgaaggcgagtcattcaccagataaataaatc 3'
     -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
        -fMet - thr - thr - glu - ile - met - arg - gly - tyr - phe - lys - asn - glu - gly - glu - ser - phe - thr - arg -   -   -   -   -
```

ir aqpZ_ybjD+

[###> orf 15 codons

sd

p35 0.7 bits

{------} sd-(6)-ir 915351 Gap 4.3 bits
|------| sd-ir 915351 aqpZ_ybjD+ total 5.1 bits

{------------------------------------... p35-(23)-p10 915407 Gap
|------------------------------------... p35-p10 915407 total 5.0
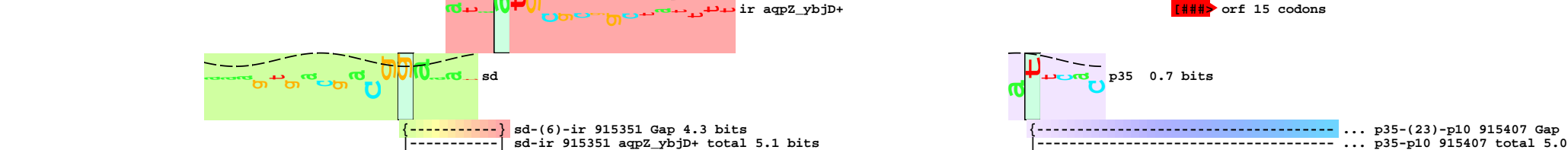
```
             *      *915410     *      *915420     *      *915430     *      *915440     *      *915450     *      *915460     *      *915470     *      *915480
5' cagtaaatttgatttagggcaacagcgggttgccccatatagtcatttgtctgattgacagtgtagtgcacgcaaagatt 3'
     -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -
        - -fMet - ser - asp -       - -fMet - thr - val -    -    -    -
     -fMet - ile -       -    -    -    -    - -fMet - pro - his - ile - val - ile - cys - leu - ile - asp - ser - val - val - his - ala - lys - asp - leu -
```

p10 5.7 bits

p10 5.9 bits

p35 6.4 bits

p10 0.9 bits

p35 2.8 bits

{-------------------------------} p35-(21)-p10 915479 Gap 3.3 bits

... <------} p35-(23)-p10 915407 Gap 1.4 bits

|-----------------------------------| p35-p10 915479 total 4.0 bits

... -------| p35-p10 915407 total 5.0 bits

... p10

{--------------------------} p35-(25)-p10 915441 Gap 4.0 bits   {-------------------------------} p35-(25)-p10 915483 Gap 4.0 bi
|--------------------------| p35-p10 915441 total 4.7 bits |-------------------------------| p35-p10 915483 total 6.9 bits

... p35

{- ... p35-(21)-p10 915504 Gap
|- ... p35-p10 915504 total 6.2
{- ... p35-(24)-p10 915507 Gap
|- ... p35-p10 915507 total 7.8
{- ... p35-(26)-p10 915509 Gap
|- ... p35-p10 915509 total 6.4

```
        *      *915490  *        *915500  *        *915510  *        *915520  *        *915530  *        *915540  *        *915550  *        *915560  *
5' t a a t c c t t t a g g c g t a a t a a a a a t a a t t t a t c a t g c t a a t t a t t t g a t t t g t t g t t t t t g c a g a c t t a t c a g c a a g a g g 3'
                                                         -fMet - leu - ile - ile -
       - ile - leu -                                     -fMet - ile - leu - leu - phe - leu - gln - thr - tyr - gln - gln - glu - gly -
```

p35 2.8 bits   p10 3.8 bits   p35 5.7 bits   p10 1.3 bits

p10 4.6 bits   {--} p35-(24)-p10 915553 Gap 2.4 bits

p10 4.4 bits |--| p35-p10 915553 total 4.5 bits

... p10 4.5 bits   p10 6.3 bits   p35 5.2 bits

{-------------------------------} p35-(23)-p10 915514 Gap 1.4 bits   {---------------------- ... p35-(22)-p10 915566 Gap
|-------------------------------| p35-p10 915514 total 7.7 bits |---------------------- ... p35-p10 915566 total 4.0

... p35 5.7 bits   {---------------------- ... p35-(25)-p10 915569 Gap

...-------------------------------} p35-(21)-p10 915504 Gap 3.3 bits |---------------------- ... p35-p10 915569 total 5.3
...-------------------------------| p35-p10 915504 total 6.2 bits
...-------------------------------} p35-(24)-p10 915507 Gap 2.4 bits
...-------------------------------| p35-p10 915507 total 7.8 bits
...-------------------------------} p35-(26)-p10 915509 Gap 3.7 bits
...-------------------------------| p35-p10 915509 total 6.4 bits

```
        *      *915570  *        *915580  *        *915590  *        *915600  *        *915610  *        *915620  *        *915630  *        *915640  *
5' g a g t a t a a c g c g a t t a t t c g c t c a t t t t t c a g a c a t t t g c c a t g c t t a a a t g t g a t g t c a t c a c g t a t t a g c a a g g c c t t t 3'
                                                         -fMet - pro - cys - leu - asn - val - met - ser - ser - arg - ile - ser - lys - ala - phe -
                                                                               -fMet -
       - val -                                           -fMet - leu - lys - cys - asp - val - ile - thr - tyr -
```

p10 1.2 bits   p10 4.1 bits

... --} p35-(22)-p10 915566 Gap 2.3 bits
... --| p35-p10 915566 total 4.0 bits
... --------} p35-(25)-p10 915569 Gap 4.0 bits
... --------| p35-p10 915569 total 5.3 bits

```
        *      *915650  *        *915660  *        *915670  *        *915680  *        *915690  *        *915700  *        *915710  *
5' c c c g t t a t c c a g c g t a a a g g a t a a g t c a c a t a t t t c t g g a g g g g a t a t g a t t c t t g a g c g c g t t g a 3'
       - pro - val - ile - leu - pro - ala -                                           -fMet - ser - ala - leu -
                                                                               -fMet - ile - leu - glu - arg - val -
```

sd   [----------------------------------- ... NC_000913.ybjD

ir aqpZ_ybjD+

{--------------} sd-(8)-ir 915696 Gap 2.4 bits
|--------------| sd-ir 915696 aqpZ_ybjD+ total 8.9 bits