- 1 -

piece 1, NC_000913, argR_yhcN-, config: linear, direction: -, begin: 3383589, end: 3383176
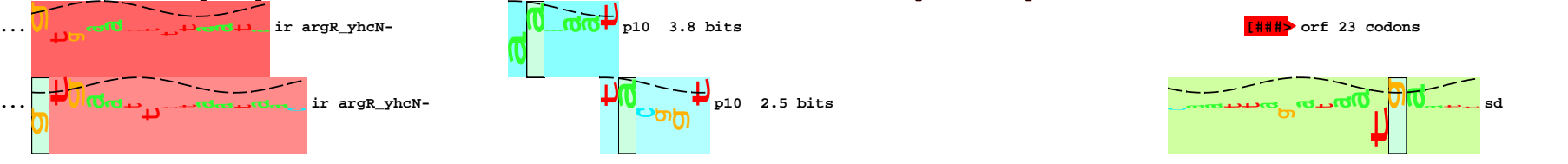
```
              *        *3383580  *        *3383570  *        *3383560  *        *3383550  *        *3383540  *        *3383530  *        *3383520  *        *3383510
5' t a a t g c a g c a a c a g t g g t t t t g a t t t t c a t g a t t t t t a c c t c g a c a t a a t c t t t t a g c t g g g c c t t t g t t t c g t g a c c a t 3'
        - asn - ala - ala - thr - val - val - leu - ile - phe - met - ile - phe - thr - ser - thr -       -       -       -       -       -       -       -fMet - thr - his -
              - met - gln - gln - gln - trp - phe -       -       -       -       -       -       -       -       -       -       -       -       -       -fMet - phe - arg - asp - pro - tyr -
...  ---------------------------------------------------------] NC_000913.yhcN
```

p10 5.5 bits

p35 5.7 bits

p10 5.2 bits

p35-(25)-p10 3383544 Gap 4.0 bits
p35-p10 3383544 total 7.2 bits

p35 4.6 bits

p10 0.7 bits

p35-(23)-p10 3383542 Gap 1.4 bits
p35-p10 3383542 total 8.4 bits

p35 5.3 bits

p35-(23)-p10 3383541 Gap 1.4 bits
p35-p10 3383541 total 4.5 bits
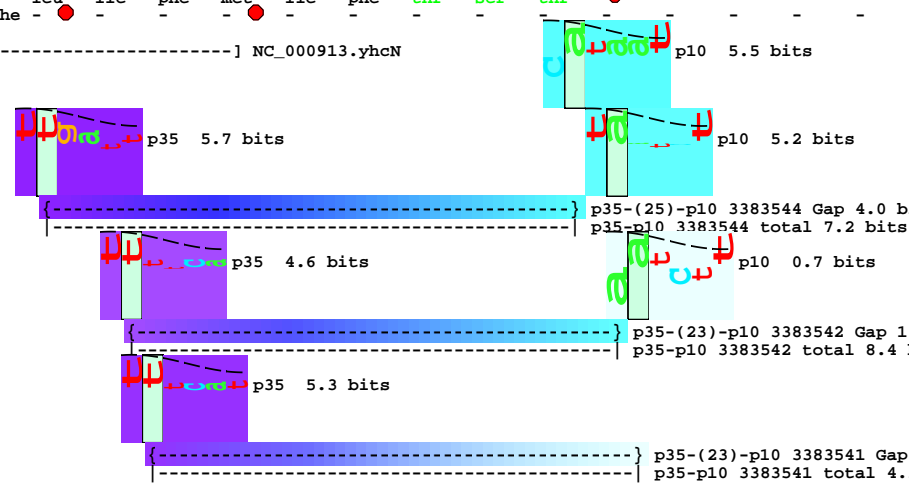
```
              *        *3383500  *        *3383490  *        *3383480  *        *3383470  *        *3383460  *        *3383450  *        *3383440  *        *3383430
5' a t c a c a a a a t c a a g t a t a c a c t a a t t a t t g a g c t a a t t a a t a c c g c g c t a a c t g t t t c a g t t g a t a c t a a g t g t t a a a a t 3'
        - ile - thr - lys - ser - ser - ile - his -       -fMet - ser -       -       -       -       -       -       -       -       -fMet - ile - leu - ser -       -fMet - leu - lys - met -
              - his - lys - ile - lys - tyr - thr - leu - ile - ile - glu - leu - ile - asn - thr - ala - leu - thr - val - ser - val - asp - thr - lys - cys -
```
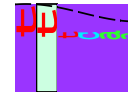
p35 4.3 bits

... ir

sd   ... ir

sd-(9)-ir 3383429 Gap 2.3 bits
sd-ir 3383429 argR_yhcN- total 6

sd

... sd-(9)-ir 3383427 Gap
... sd-ir 3383427 argR_yhcN-

p35 5.6 bits

p10 3.8 bits

p35-(21)-p10 3383432 Gap 3.3 bits
p35-p10 3383432 total 4.8 bits
p35-(23)-p10 3383424 Gap
... p35-p10 3383424 total 4.5
p35-(24)-p10 3383423 Gap
... p35-p10 3383423 total 4.6
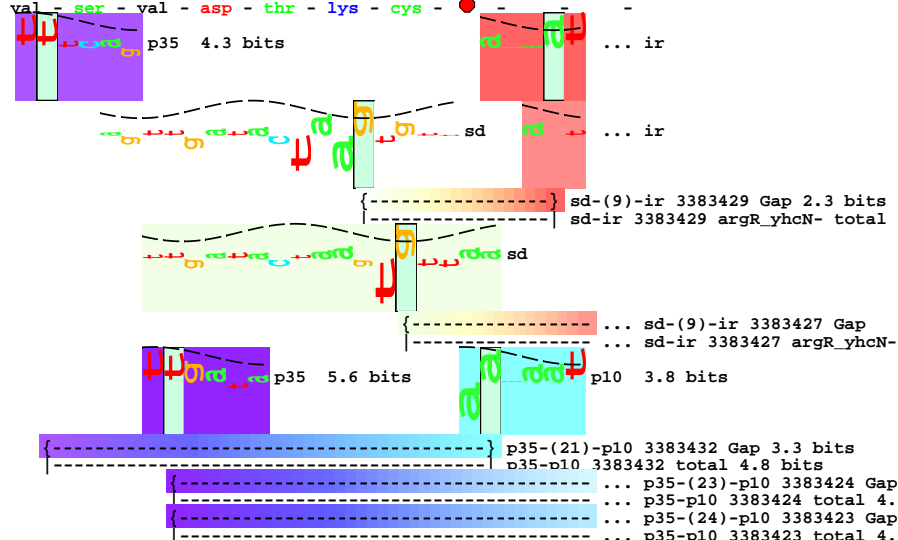
```
              *        *3383420  *        *3383410  *        *3383400  *        *3383390  *        *3383380  *        *3383370  *        *3383360  *        *3383350
5' g t g a a t t t t a a t a a c a a g a a t t a a a a a t a c g g t t a t t t a t c g t t a a t t c a a t t a g a t a a t g a a t t t t 3'
        -val - asn - phe - asn - asn - lys - lys - glu - leu - lys - ile - arg - leu - phe - ile - val - asn - ser - ser - phe - phe - asn -       -       -fMet - asn - phe -
                                                                                                                                                                -fMet -
```

... ir argR_yhcN-

p10 3.8 bits

[###] orf 23 codons

... ir argR_yhcN-

p10 2.5 bits

sd

[###> orf 2 codons   p35 5.2 bits   {------------- ... sd-(12)-ir 3383341 Gap

p10 0.4 bits

|------------- ... sd-ir 3383341 argR_yhcN-

p10 1.4 bits

{-------------- ... p35-(23)-p10 3383344 Gap

... } sd-(9)-ir 3383427 Gap 2.3 bits
... | sd-ir 3383427 argR_yhcN- total 5.4 bits |------------- ... p35-p10 3383344 total 9.3
{------------- ... p35-(25)-p10 3383342 Gap

p35 4.7 bits |------------- ... p35-p10 3383342 total 5.0

{------------------} p35-(21)-p10 3383400 Gap 3.3 bits
|------------------| p35-p10 3383400 total 5.2 bits
... -------} p35-(23)-p10 3383424 Gap 1.4 bits
... -------| p35-p10 3383424 total 4.5 bits
... --------} p35-(24)-p10 3383423 Gap 2.4 bits
... --------| p35-p10 3383423 total 4.6 bits

p35 5.7 bits

{-------------------------} p35-(25)-p10 3383395 Gap 4.0 bits
|-------------------------| p35-p10 3383395 total 4.2 bits

```
       *    *3383340  *    *3383330  *    *3383320  *    *3383310  *    *3383300  *    *3383290  *    *3383280  *    *3383270
5' gcataatgtgctttttttaccttatgtattcattgtgtgaatgacatgtcgcagtaaaacgcactattcgttaaattaatc 3'
    - ala - his - asn - val - leu - phe - leu - pro - tyr - val - phe - ile - val - -fMet - asn - asp - met - ser - gln - thr - cys - arg - ser - lys - thr - his - tyr - ser - leu - asn - -
         -fMet - cys - phe - phe - tyr - leu - met - tyr - ser - leu - cys - glu - thr - cys - arg - ser - lys - thr - his - tyr - ser - leu - asn -
```

ir argR_yhcN-   [###> orf 13 codons   p10 3.3 bits

p10 5.5 bits   p35 3.8 bits

... ------} sd-(12)-ir 3383341 Gap 4.0 bits
... --------| sd-ir 3383341 argR_yhcN- total 5.7 bits   {----------------------} p35-(22)-p10 3383291 Gap 2.3 bits
... ----} p35-(23)-p10 3383344 Gap 1.4 bits |----------------------| p35-p10 3383291 total 4.8 bits
... ----| p35-p10 3383344 total 9.3 bits
... --------} p35-(25)-p10 3383342 Gap 4.0 bits
... --------| p35-p10 3383342 total 5.0 bits
p10 3.8 bits

```
       *    *3383260  *    *3383250  *    *3383240  *    *3383230  *    *3383220  *    *3383210  *    *3383200  *    *3383190  *
5' gcagggggaaagcagggggttgagagggataagcaacattttccccgccgtcagaaacgacggggcagagattaaagctcct 3'
    -     -     -     -     -     -fMet - arg - gly - ile - ser - asn - ile - phe - pro - ala - val - arg - asn - asp - gly - ala - glu - ile - lys - ala - pro -
```

<-------------------- ... NC_000913.argR

```
       *3383180
5' ggtcgaaca 3'
    - gly - arg - thr -
```

... ----------------- ... NC_000913.argR