piece 1, NC_000913, ulaG_ulaA-, config: linear, direction: -, begin: 4418032, end: 4417629

```
        *4418030  *        *4418020  *        *4418010  *        *4418000  *        *4417990  *        *4417980  *        *4417970  *        *4417960  *
5' cacggtaaagatgttgtagaggatctccataacgatctcctgaagaagaggtaaccgggtattccacacacccggaatgtt 3'
   -   his - gly - lys - asp - val - val - glu - asp - leu - his - asn - asp - leu - leu - lys - lys - arg -   -   -   -   -   -   -   -   -   -fMet - leu -
   -       arg -   -   -   met - leu -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -
...----------------------------------------------------------------] NC_000913.ulaA

        *4417950  *        *4417940  *        *4417930  *        *4417920  *        *4417910  *        *4417900  *        *4417890  *        *4417880  *
5' gtgcactcactctaattttcaaaagtaatcacaacagattatttatgattaaatgtgacgcgaccgcaaataattccac 3'
   -fMet - his - ser - leu -   -   -   -   -   -   -   -   -   -   -   -   -   -   -fMet - ile - lys - cys - asp - ala - thr - arg - lys -   -   -   -   -
   -       cys - thr - his - ser - asn - phe - gln - lys -   -   -   -   -   -   -   -   -   -fMet - thr - arg - pro - ala - asn - asn - ser - thr -
                                                                                        -fMet
```
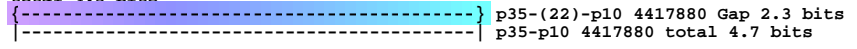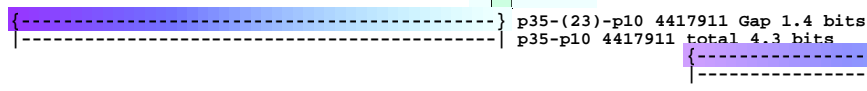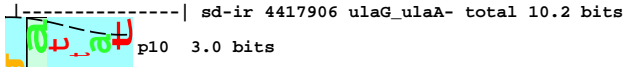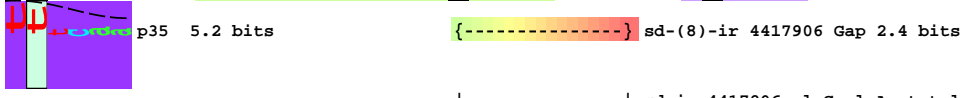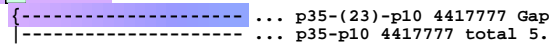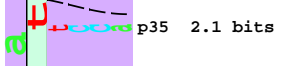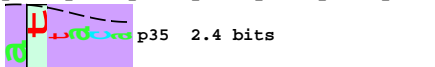
p35 4.6 bits

ir ulaG_ulaA-

[###> orf 10 codons

sd

p35 2.5 bits

p10 4.6 bits

p35 5.2 bits

{-----------------} sd-(8)-ir 4417906 Gap 2.4 bits

|---------------| sd-ir 4417906 ulaG_ulaA- total 10.2 bits

p10 3.0 bits

{------------------------} p35-(22)-p10 4417913 Gap 2.3 bits
|------------------------| p35-p10 4417913 total 5.3 bits

p10 0.5 bits

{--------------------------} p35-(23)-p10 4417911 Gap 1.4 bits
|--------------------------| p35-p10 4417911 total 4.3 bits

{--------------------------} p35-(22)-p10 4417880 Gap 2.3 bits
|--------------------------| p35-p10 4417880 total 4.7 bits

```
        *4417870  *        *4417860  *        *4417850  *        *4417840  *        *4417830  *        *4417820  *        *4417810  *        *4417800  *        *4417790
5' atggatagagtggggattcacacaacgaaacaattatccatttaaattcatttagttaattgaattacacattccattaaat 3'
   -fMet - asp - arg - val - gly - phe - thr - gln - arg - asn - asn - tyr - pro - phe - lys - phe - ile -   -   -   -   -   -   -   -   -   -   -   -   -
   -       trp - ile - glu - trp - asp - ser - his - asn - glu - thr - ile - ile - his - leu - asn - ser - phe - ser -   -fMet - asn - tyr - thr - phe - his -   -   -
```
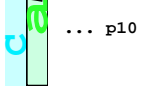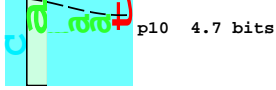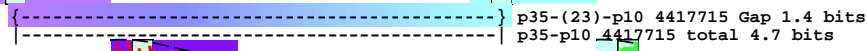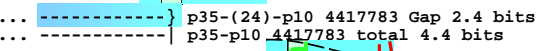
p35 2.4 bits

{------------------------------... p35-(24)-p10 4417783 Gap
|------------------------------... p35-p10 4417783 total 4.4

p35 2.1 bits

{--------------------------... p35-(23)-p10 4417777 Gap
|--------------------------... p35-p10 4417777 total 5.4

```
        *        *4417780  *        *4417770  *        *4417760  *        *4417750  *        *4417740  *        *4417730  *        *4417720  *        *4417710
5' ctttccatactcaaatcaacacaacaacttccctggcaaaaagtcaaaaaatggtcattgccttcctgaaaaaatagtgtca 3'
   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -fMet - ser -   -   -
   -                                                               -fMet - val - ile - ala - phe - leu - lys - lys -   -   -   -   -
                                                                   -fMet - pro - ser -
```

p10 4.4 bits

p35 3.4 bits

p10 2.8 bits

...{-----------} p35-(24)-p10 4417783 Gap 2.4 bits
...|-----------| p35-p10 4417783 total 4.4 bits

{-------------------------------} p35-(23)-p10 4417715 Gap 1.4 bits
|-------------------------------| p35-p10 4417715 total 4.7 bits
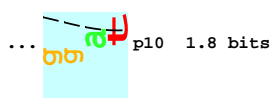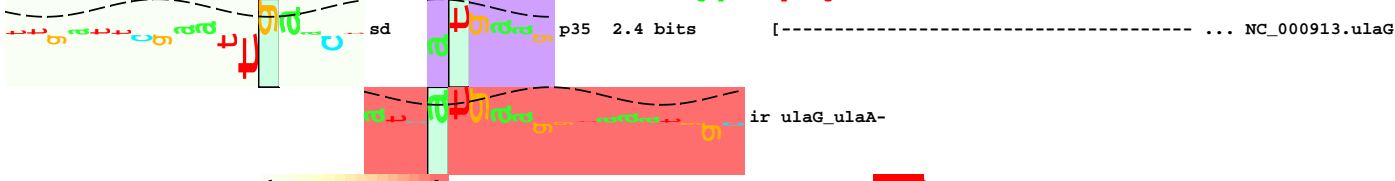
p10 4.7 bits

p35 6.2 bits

... p10
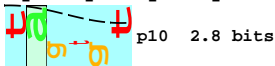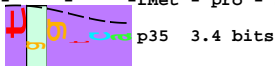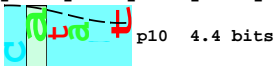
... p35-(23)-p10 4417777 Gap 1.4 bits
... p35-p10 4417777 total 5.4 bits

{ p35-(23)-p10 4417709 Gap 1.4 b
| p35-p10 4417709 total 6.5 bits

```
          *      *4417700  *        *4417690  *        *4417680  *        *4417670  *        *4417660  *        *4417650  *        *4417640  *        *4417630
5' g g a t t a a t c a a a a c c a a t c a c a t a t t g a t t c g a a t t g a a c t a t c a t g a a g g t a a a t g g c g a t g a g t a a a g t g a a a g t a t t 3'
   - gly - leu - ile - lys - thr - asn - his - ile - leu - ile - arg - ile - glu - leu - ser - - - - -fMet - ala - met - ser - lys - val - lys - ser -
         -   -   -   -   -   -   -   -   -   -fMet - asn - tyr - his - glu - gly - lys - trp - arg - - - - -
         -   -   -   -   -   -   -   -   -   -fMet - lys - val - asn - gly - asp - glu - - - - - - -
```

sd   p35 2.4 bits   [--- ... NC_000913.ulaG

ir ulaG_ulaA-

{-----------------} sd-(8)-ir 4417664 Gap 2.4 bits
|-----------------| sd-ir 4417664 ulaG_ulaA- total 6.0 bits

... p10 1.8 bits

[###> orf 8 codons

p10 5.1 bits

ir ulaG_ulaA-

sd   ir ulaG_ulaA-
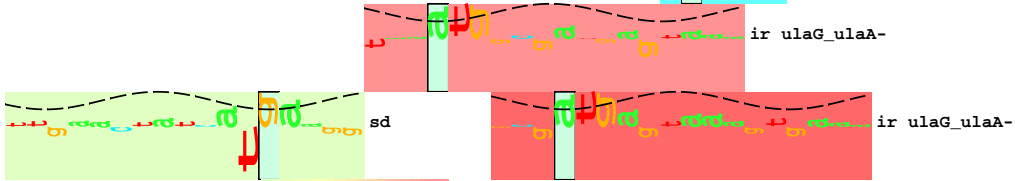
{-----------------} sd-(8)-ir 4417654 Gap 2.4 bits
|-----------------| sd-ir 4417654 ulaG_ulaA- total 6.6 bits

sd

{-----------------} sd-(10)-ir 4417648 Gap 2.7 bits
|-----------------| sd-ir 4417648 ulaG_ulaA- total 13.0 bits

{-------------------------------------} p35-(21)-p10 4417642 Gap 3.3 bits
|-------------------------------------| p35-p10 4417642 total 4.2 bits