- 1 -

piece 1, NC_000913, argF_IS1C-, config: linear, direction: -, begin: 289887, end: 289510

```
        *       *289880      *        *289870      *       *289860      *        *289850      *       *289840      *        *289830      *       *289820      *        *289810
5' aaacactatcaataagttggagtcattaccggtaacagatatatcgcctccatcaccgctgaagtaatgaagtaaggcag 3'
    - lys - his - tyr - gln -   asn - thr - ile - asn - lys - leu - glu - ser - leu - pro - gly - asn - arg - tyr - ile - ala - ser - ile - thr - ala - glu - val - met - lys - - - -
         - thr - leu - ser - ile - ser - trp - ser - his - tyr - pro - val - thr - asp - ile - ser - pro - pro - ser - pro - leu - lys - - - - - - -
```

```
        *       *289800      *        *289790      *       *289780      *        *289770      *       *289760      *        *289750      *       *289740      *        *289730
5' caagctcgccatgttctccgccatttagaagcataatccttaaaatcataaagaaggccaatcattctcattctgact 3'
    - - - - - - - - - - - - - - - - -
    -fMet - phe - ser - ala - ile - leu - glu - ala - - - - - - - - - -
```

p35 2.6 bits
p10 5.5 bits
p10 3.1 bits
p35 1.7 bits

{-----------------------------} p35-(21)-p10 289772 Gap 3.3 bits

|-----------------------------| p35-p10 289772 total 4.8 bits

... p35-(21)-p10 289713 Gap
|----------------- ... p35-p10 289713 total 4.9

p35 2.7 bits

{--------------------------------} p35-(23)-p10 289741 Gap 1.4 bits
|--------------------------------| p35-p10 289741 total 4.3 bits

```
        *       *289720      *        *289710      *       *289700      *        *289690      *       *289680      *        *289670      *       *289660      *        *289650      *
5' cgacctggttgtagaattcgatccaatgtctttctgcttctgcagagaatcggaggcagatacgattattttcacacacgg 3'
    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                     -fMet - ser - phe - cys - phe - cys - arg - glu - ser - glu - ala - asp - thr - ile - ile - phe - thr - his - gly -
    -fMet - - - - - - - - - - - - - - - - - - - - -
```

p10 6.6 bits

... }--------------------------------} p35-(21)-p10 289713 Gap 3.3 bits
... }--------------------------| p35-p10 289713 total 4.9 bits

```
        *289640      *        *289630      *       *289620      *        *289610      *       *289600      *        *289590      *       *289580      *        *289570      *
5' acggtttgcctccacctttgtagaagaattgtgaaatgggggttgcaaatgaataattacacataaagtgaattta 3'
    - - - -fMet - pro - pro - pro - leu - - - - - -fMet - lys - trp - gly - cys - lys - - - - - - - - -
    - arg - val - cys - leu - his - leu - cys - lys - lys - glu - leu - - - - - - - - - - - -
                                                   -fMet - gly - leu - gln - met - asn - asn - cys - thr - tyr - lys - val - asn - phe - asn -
```

sd
ir argF_IS1C-
p10 5.1 bits

p35 6.2 bits

{---------------------} sd-(10)-ir 289606 Gap 2.7 bits

|---------------------| sd-ir 289606 argF_IS1C- total 6.5 bits

ir argF_IS1C-

p10 0.8 bits

sd

{-----------------} sd-(7)-ir 289594 Gap 3.7 bits
|-----------------| sd-ir 289594 argF_IS1C- total 8.7 bits

p10 4.6 bits

{-------------------------} p35-(23)-p10 289614 Gap 1.4 bits
|-------------------------| p35-p10 289614 total 5.5 bits

p35 3.7 bits
p35 6.1 bits

{-----------------------------} p35-(22)-p10 289590 Gap 2.3 bits

- 2 -
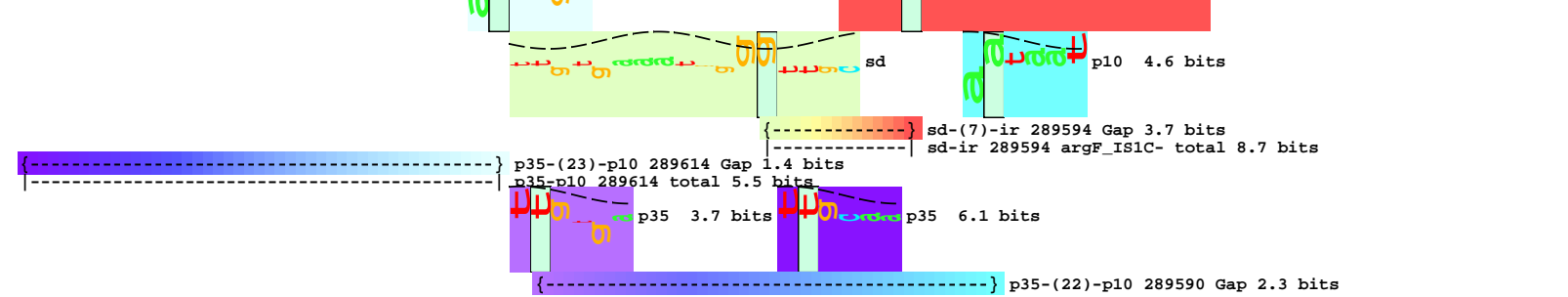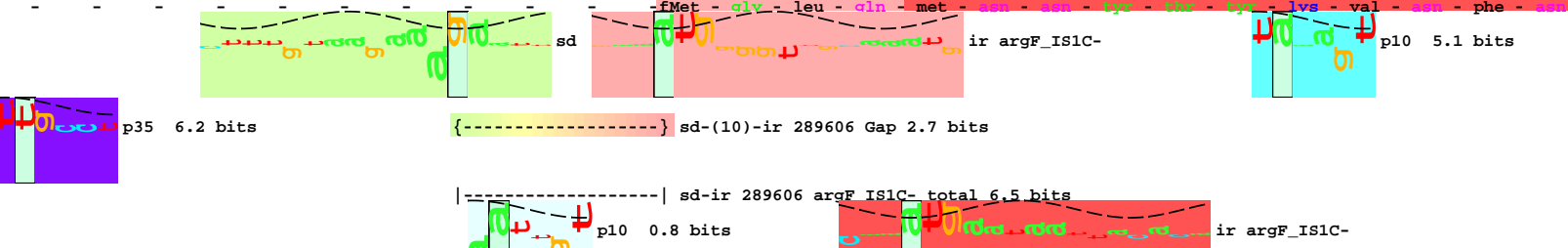
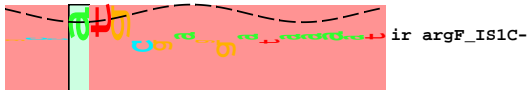p35-p10 289590 total 6.0 bits
p35-(23)-p10 289576 Gap 1.4 bits
p35-p10 289576 total 9.7 bits

*289560   *   *289550   *   *289540   *   *289530   *   *289520   *   *289510

5' attcaataagtggcgttcgccatgcgaggataaaatgtccgatttatacaaaaa 3'

-fMet - ala - phe - ala - met - arg - gly -
-fMet - ser - asp - leu - tyr - lys -
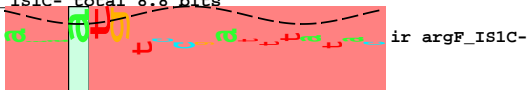- ser - ile - ??? - val - arg - his - ala - arg - ile - lys - cys - pro - ile - lys - lys - lys -

sd
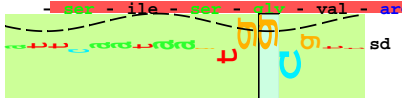
[------------------------------------- ... NC_000913.argF

ir argF_IS1C-

[###> orf 4 codons

sd-(9)-ir 289542 Gap 2.3 bits
sd-ir 289542 argF_IS1C- total 8.8 bits

ir argF_IS1C-

sd

sd-(6)-ir 289529 Gap 4.3 bits
sd-ir 289529 argF_IS1C- total 8.5 bits