- 1 -

piece 1, NC_000913, phoE_proB-, config: linear, direction: -, begin: 259641, end: 259305

```
         *259640    *        *259630    *        *259620    *        *259610    *        *259600    *        *259590    *        *259580    *        *259570    *
5' ttttaccaccagcgtctggctgtcactcatgattctctgccattcaatttaggaaaaatgatatcaaacgaacgttttag 3'
   - phe - tyr - his - gln - arg - leu - ala - val - thr - his - asp - ser - leu - pro - phe - asn - phe - arg - lys - asn - asp - ile - lys - arg - thr - phe - -
   -     - phe - thr - thr - ser - val - trp - leu - ser - leu - met - ile - leu - cys - his - ser - ile - leu - gly - lys - met - ile - ser - asn - glu - arg - phe - ser -
   -     - leu - pro - pro - ala - ser - gly - cys - his - ser - -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -
```
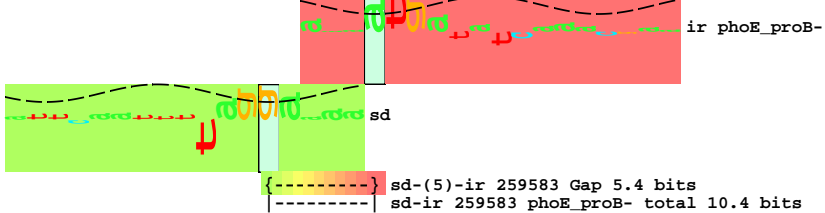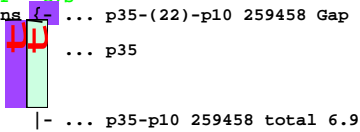
... --] NC_000913.proB

ir phoE_proB-

sd

{---------} sd-(5)-ir 259583 Gap 5.4 bits
|---------| sd-ir 259583 phoE_proB- total 10.4 bits

```
     *259560    *        *259550    *        *259540    *        *259530    *        *259520    *        *259510    *        *259500    *        *259490    *        *259480
5' caggactgtcgtcgggttgccaaccatctgcgagcaaagcatggcgttttgttgcgcgggatcagcaagcctagcggcagtt 3'
   -   -   -   -   -fMet - pro - thr - ile - cys - glu - gln - ser - met - ala - phe - cys - cys - ala - gly - ser - ala - ser - leu - ala - ala - val -
   - arg - thr - val - val - gly - cys - gln - pro - ser - ala - ser - lys - ala - trp - arg - phe - val - ala - arg - asp - gln - gln - ala - -   -   -fMet -
   -   -   -   -   -   -   -fMet - leu - arg - gly - ile - ser - lys - pro - ser - gly - ser - cys -
```

[###> orf 32 codons {- ... p35-(22)-p10 259458 Gap
... p35
|- ... p35-p10 259458 total 6.9

```
          *        *259470    *        *259460    *        *259450    *        *259440    *        *259430    *        *259420    *        *259410    *        *259400
5' gtttacgcttttattacagatttaataaattaccacatttaagaatattattaatctgtaatatatctttaacaatctca 3'
   - val - tyr - ala - phe - ile - thr - asp - leu - ile - asn - tyr - his - ile - leu - arg - ile - leu - leu - ile - cys - asn - ile - ser - leu - thr - ile - ser -
   - phe - thr - leu - leu - leu - gln - ile - -   - leu - arg - phe - tyr - tyr - arg - phe - asn - lys - leu - pro - his - phe - lys - asn - ile - ile - asn - leu - -   -   -   -   -
```
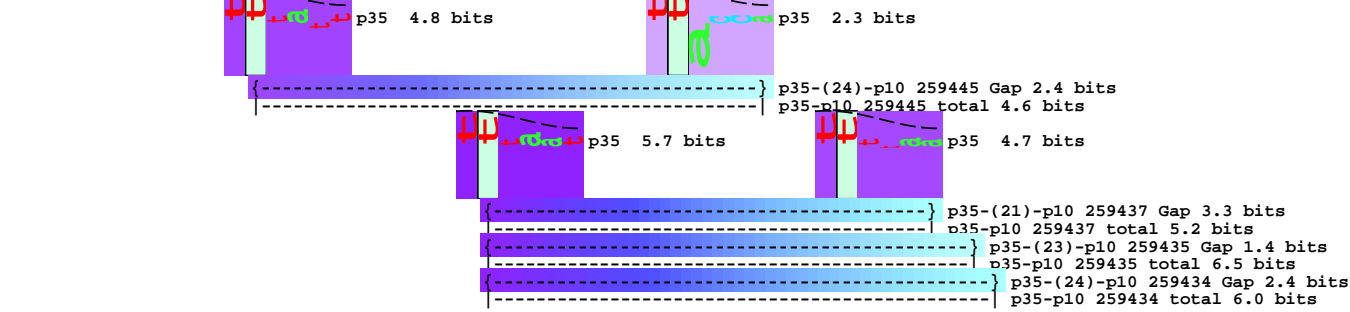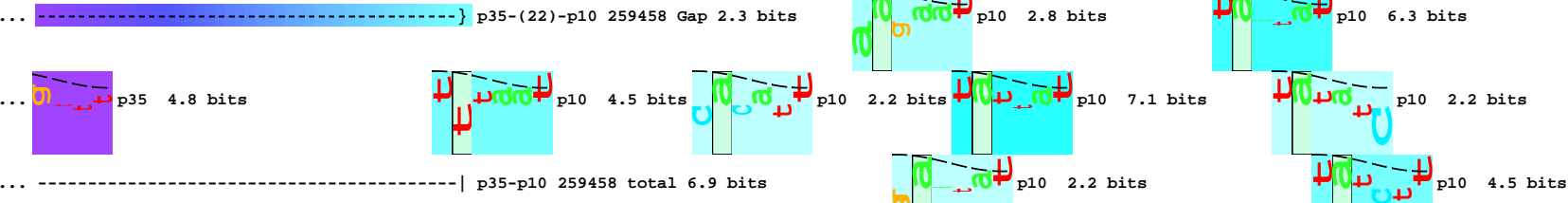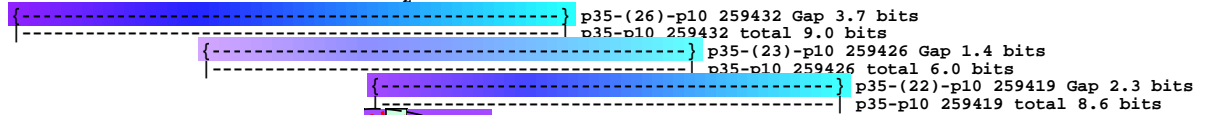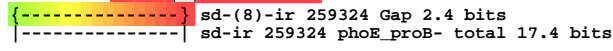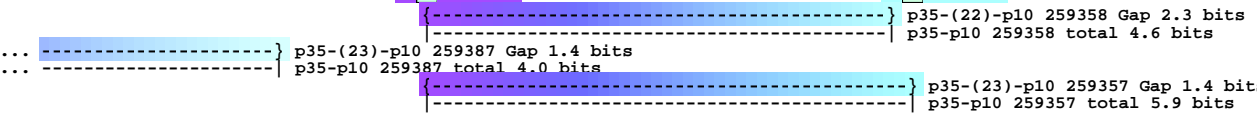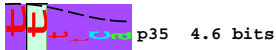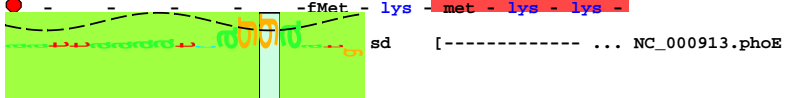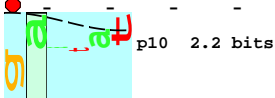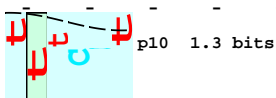
... [=============================} p35-(22)-p10 259458 Gap 2.3 bits

... p35 4.8 bits   p10 4.5 bits   p10 2.2 bits   p10 7.1 bits   p10 2.2 bits
p10 2.8 bits   p10 6.3 bits

... ---| p35-p10 259458 total 6.9 bits

p10 2.2 bits   p10 4.5 bits

p35 4.6 bits   p10 5.7 bits   p10 2.7 bits   p35 4.1 bits

{=================================} p35-(24)-p10 259453 Gap 2.4 bits
p10 5.2 bits   {====================== ... p35-(23)-p10 259387 Gap

|----------------------------------| p35-p10 259453 total 7.9 bits |---------------------- ... p35-p10 259387 total 4.0

p35 4.8 bits   p35 2.3 bits

{==================================} p35-(24)-p10 259445 Gap 2.4 bits
|----------------------------------| p35-p10 259445 total 4.6 bits

p35 5.7 bits   p35 4.7 bits

{=================================} p35-(21)-p10 259437 Gap 3.3 bits
|----------------------------------| p35-p10 259437 total 5.2 bits
{=================================} p35-(23)-p10 259435 Gap 1.4 bits
|----------------------------------| p35-p10 259435 total 6.5 bits
{=================================} p35-(24)-p10 259434 Gap 2.4 bits
|----------------------------------| p35-p10 259434 total 6.0 bits