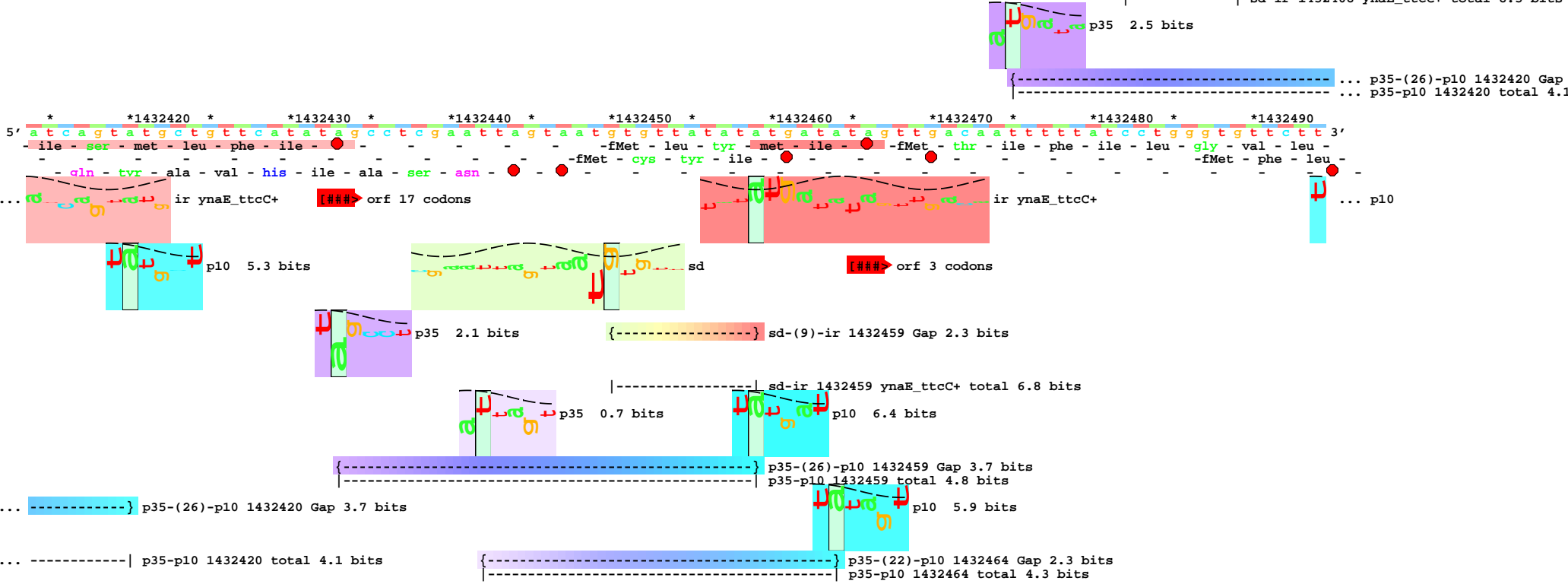
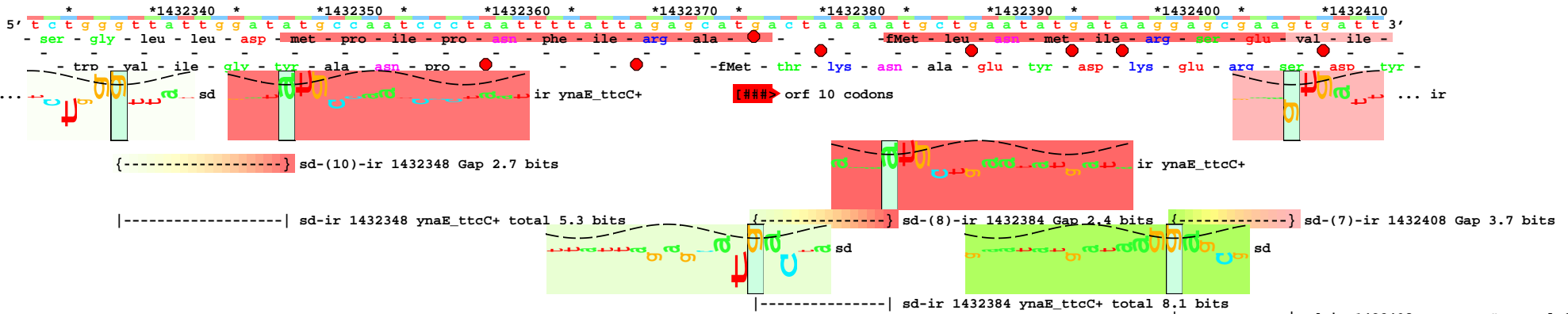
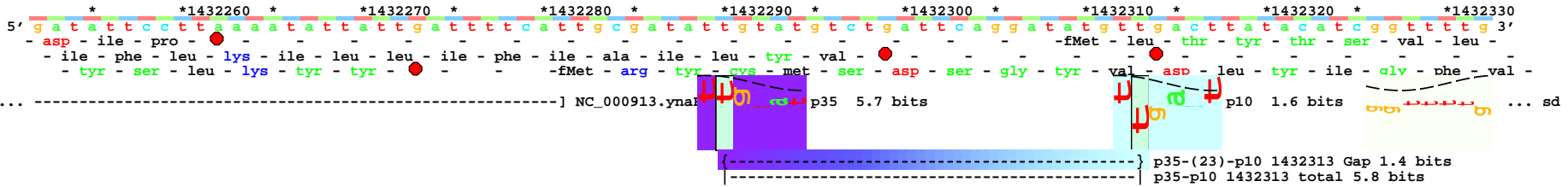


piece 1, NC\_000913, ynaE\_ttcC+, config: linear, direction: +, begin: 1432252, end: 1433001



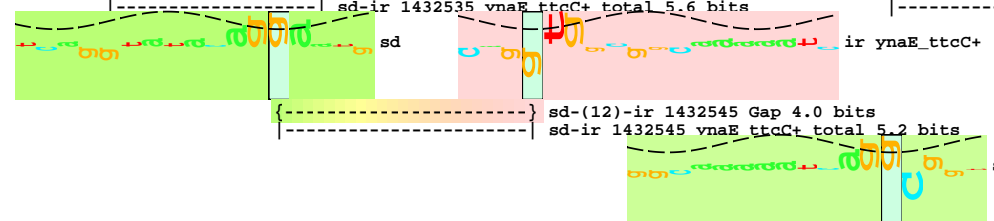
p35 6.4 bits

... p35-(26)-p10 1432495 Gap ... p35-p10 1432495 total 7.8

\*1432500 \* \*1432510 \* \*1432520 \* \*1432530 \* \*1432540 \* \*1432550 \* \*1432560 \* \*1432570 \*  
5' a a a g t t c g t a g a t a a a c a t t g t c g t t t c a g g t a t a c a g g a a t g c t a a c a g g t g g c g g c a a a a a t c a g g c g g t t t a t g g c g c 3'  
- lys - val - arg - arg - fMet - ser - phe - gln - val - tyr - arg - asn - ala - asn - arg - trp - arg - gln - lys - ser - gly - gly - leu - trp - arg -  
- lys - phe - val - asp - lys - his - cys - arg - phe - arg - tyr - thr - gly - met - leu - thr - gly - gly - lys - asn - gln - ala - val - tyr - gly - ala -



sd-(10)-ir 1432535 Gap 2.7 bits  
sd-ir 1432535 ynaE\_ttcC+ total 5.6 bits  
sd-(7)-ir 1432569 Gap 3.7 bits  
sd-ir 1432569 ynaE\_ttcC+ total 7.6 bits



sd-(12)-ir 1432545 Gap 4.0 bits  
sd-ir 1432545 ynaE\_ttcC+ total 5.2 bits

... } p35-(26)-p10 1432495 Gap 3.7 bits  
... | p35-p10 1432495 total 7.8 bits

\*1432580 \* \*1432590 \* \*1432600 \* \*1432610 \* \*1432620 \* \*1432630 \* \*1432640 \* \*1432650 \*  
5' a a g c t g a a g t g g c a a c t a t c t t a t g c a g a g a c t c t a c a c g g a t t g g g t t t a a a a g t a t a c a t a g a t a a c a g t t t 3'  
- lys - leu - lys - trp - gln - leu - gln - thr - ile - leu - cys - arg - asp - ser - thr - arg - ile - gly - phe - lys - ser - ile - his - arg -  
- ser - ala - glu - val - ala - thr - ala - asn - tyr - leu - met - gln - arg - leu - tyr - thr - asp - trp - val -

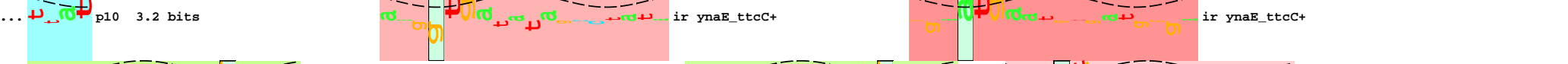


orf 16 codons

p35 5.6 bits

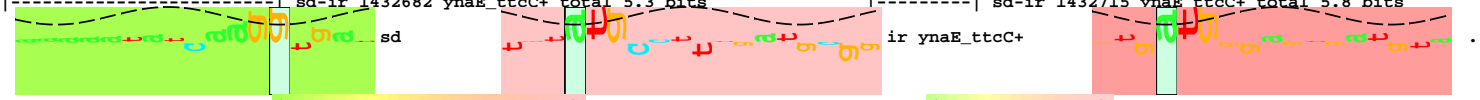
p35-(25)-p10 1432656 Gap 4.0 b  
p35-p10 1432656 total 4.7 bits

\*1432660 \* \*1432670 \* \*1432680 \* \*1432690 \* \*1432700 \* \*1432710 \* \*1432720 \* \*1432730 \*  
5' t t a t c t g a a g a a g a a a a a t a t c a a g g t g a t a t a g c c t a t a t g c c t t t g a t g c g g a g g a a t g a a t g t g a t g g g a g t g a t g t a 3'  
- tyr - leu - lys - lys - lys - asn - ile - lys - val - ile - fMet - pro - leu - met - arg - arg - asn - glu - cys - asp - gly - ser - asp - val -  
- ser - fMet - asn - val - met - gly - val - met - tyr -

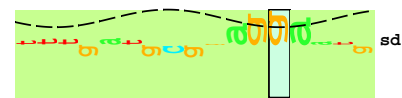


orf 3 codons

sd-(13)-ir 1432682 Gap 4.6 bits  
sd-ir 1432682 ynaE\_ttcC+ total 5.3 bits  
sd-(5)-ir 1432715 Gap 5.4 bits  
sd-ir 1432715 ynaE\_ttcC+ total 5.8 bits



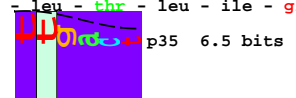
sd-(14)-ir 1432696 Gap 4.9 bits  
sd-ir 1432696 ynaE\_ttcC+ total 7.2 bits  
sd-(8)-ir 1432721 Gap 2.4 bits



sd-ir 1432721 ynaE ttcC+ total 5.8 bits  
sd-(11)-ir 1432724 Gap 3.0 bits  
sd-ir 1432724 ynaE\_ttcC+ total 8.0 bits

\*1432740 \* \*1432750 \* \*1432760 \* \*1432770 \* \*1432780 \* \*1432790 \* \*1432800 \* \*1432810 \*  
5' t c t g a a t a g t t g a a a a a c c g c a g t c a c g t c g t a t g c a a g a a c g t g c g g t t g g t t t g a c t t t g a t t g a g a c g t t t g g a 3'  
- ser - glu - fMet - lys - asn - arg - ser - his - val - val - cys - lys - asn - val - leu - arg - leu - val - fMet - arg - arg - phe - gly -  
- leu - asn - ser - fMet - gln - glu - arg - ala - ala - val - gly - leu - thr - leu - ile - glu - thr - phe - trp - asn -

[###] orf 17 codons



[###] orf 12 codons

p35-(23)-p10 1432818 Gap 1.4 b  
p35-p10 1432818 total 5.5 bits

... ir ynaE\_ttcC+

... p35-(24)-p10 1432819 Gap  
... p35-p10 1432819 total 5.5  
... p35-(26)-p10 1432821 Gap  
... p35-p10 1432821 total 4.1

\*1432820 \* \*1432830 \* \*1432840 \* \*1432850 \* \*1432860 \* \*1432870 \* \*1432880 \* \*1432890 \*  
5' a t t t t t t t t c g g t g g c a a a a t g g g g c a a a a c g c t g c a a a a g g g g c a a a a a g g g g c a a a a a g a g t g g a t t a t c g t a g c t 3'  
- ile - phe - phe - gly - gly - lys - asn - gly - ala - lys - arg - cys - lys - arg - gly - lys - lys - gly - ala - lys - lys - glu - trp - ile - ile - val - ala -  
- phe - phe - ser - val - ala - lys - met - gly - gln - asn - ala - ala - lys - gly - ala - lys - lys - gly - gln - lys - lys - ser - gly - leu - ser -  
- phe - phe - arg - trp - gln - lys - trp - gly - lys - thr - leu - gln - lys - gly - gln - lys - arg - gly - lys - lys - arg - val - asp - tyr - arg - ser - leu -

[###] orf 20 codons



... p10 0.4 bits

sd-(9)-ir 1432838 Gap 2.3 bits  
sd-ir 1432838 ynaE\_ttcC+ total 6.3 bits

... p10 1.4 bits

... } p35-(24)-p10 1432819 Gap 2.4 bits  
... } p35-p10 1432819 total 5.5 bits  
... } p35-(26)-p10 1432821 Gap 3.7 bits  
... } p35-p10 1432821 total 4.1 bits

... p10 1.3 bits

\*1432900 \* \*1432910 \* \*1432920 \* \*1432930 \* \*1432940 \* \*1432950 \* \*1432960 \* \*1432970 \* \*1432980  
5' t a t t g t t g t c g c t g a t g a t a t t t a a c a c a t t t g a a a a a t a a g t a a a a t a c t t a t g a g t c a g a g a g t t g t g a t t t t t g c c c t t 3'  
- tyr - cys - cys - arg - fMet - ser - gln - arg - val - val - ile - phe - ala - leu -  
- leu - leu - ser - leu - met - ile - phe - asn - thr - leu - lys - asn - lys - fMet - pro - leu -

p35 3.8 bits



p35 4.6 bits

p10 2.2 bits

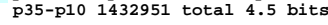
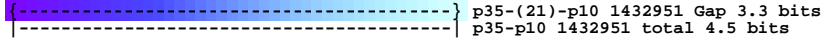
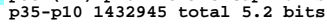
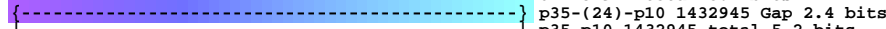
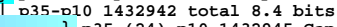
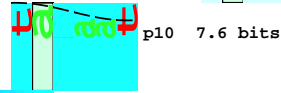
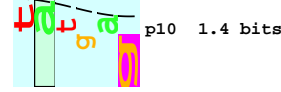
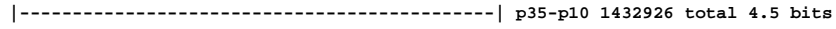
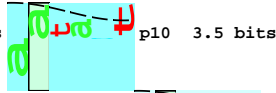
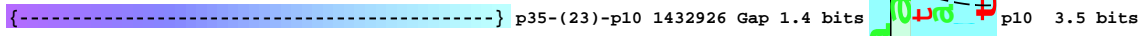
sd-(11)-ir 1432951 Gap 3.0 bits

... p35-(22)-p10 1432996 Gap



|-----| sd-ir 1432951 ynaE\_ttcC+ total 7.1 bits

|----- ... p35-p10 1432996 total 6.9



\* \*1432990 \* \*1433000  
 5' a c t t g t t c a g g t t g t a t t g t t 3'  
 - thr - cys - ser - gly - cys - ile - val -  
 - leu - val - gln - val - val - leu -  
 - fMet - phe - arg - leu - tyr - cys -

