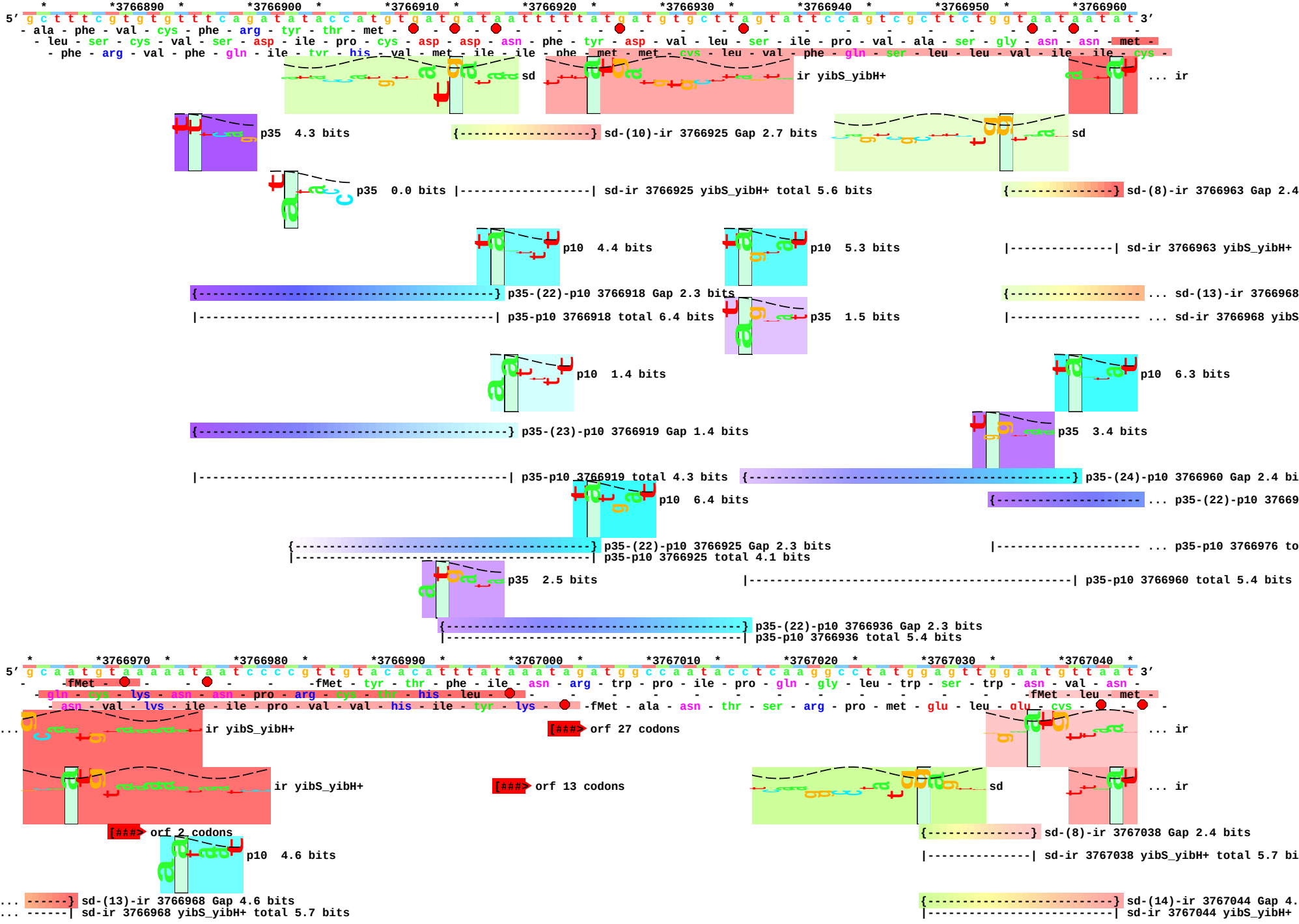
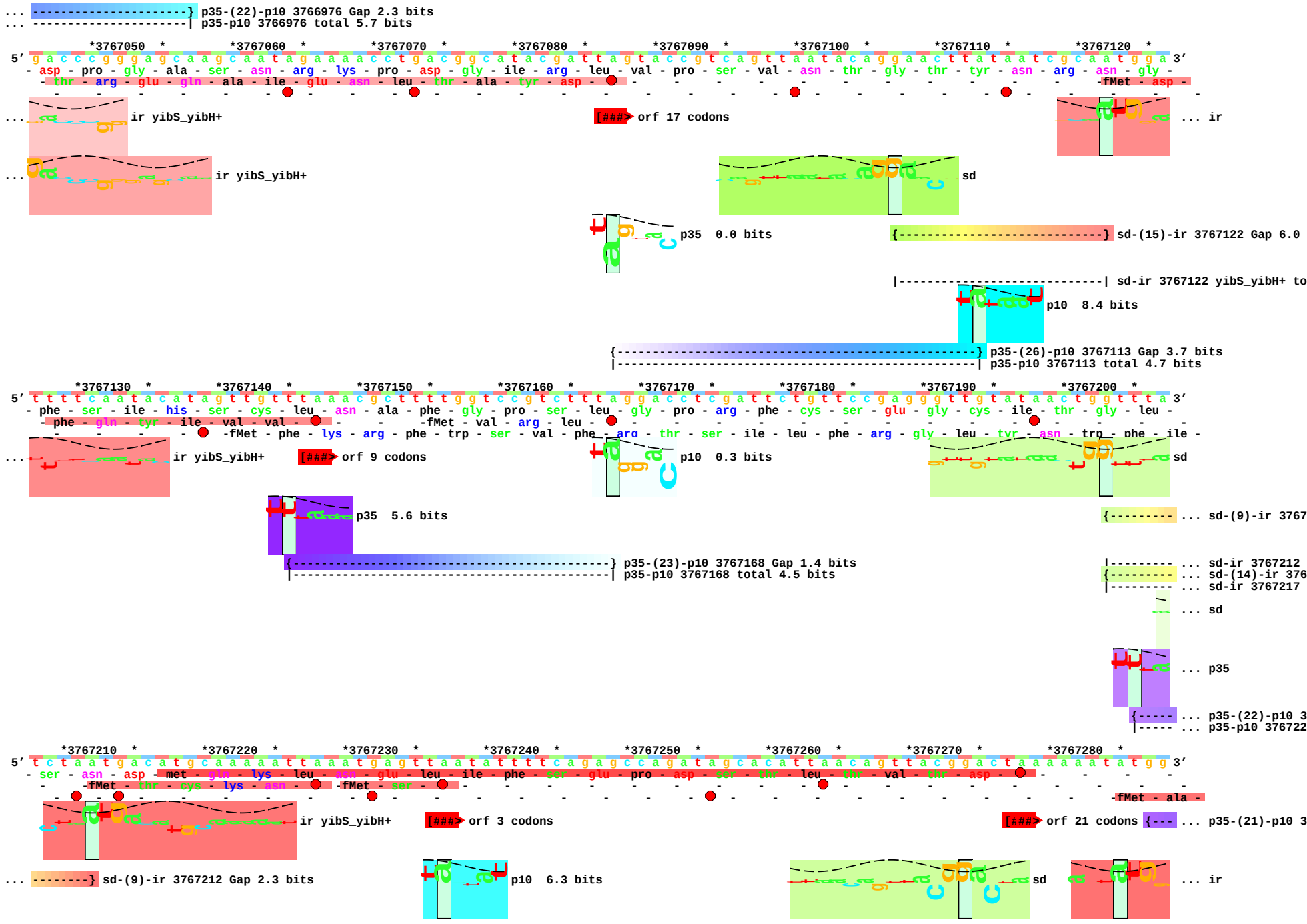
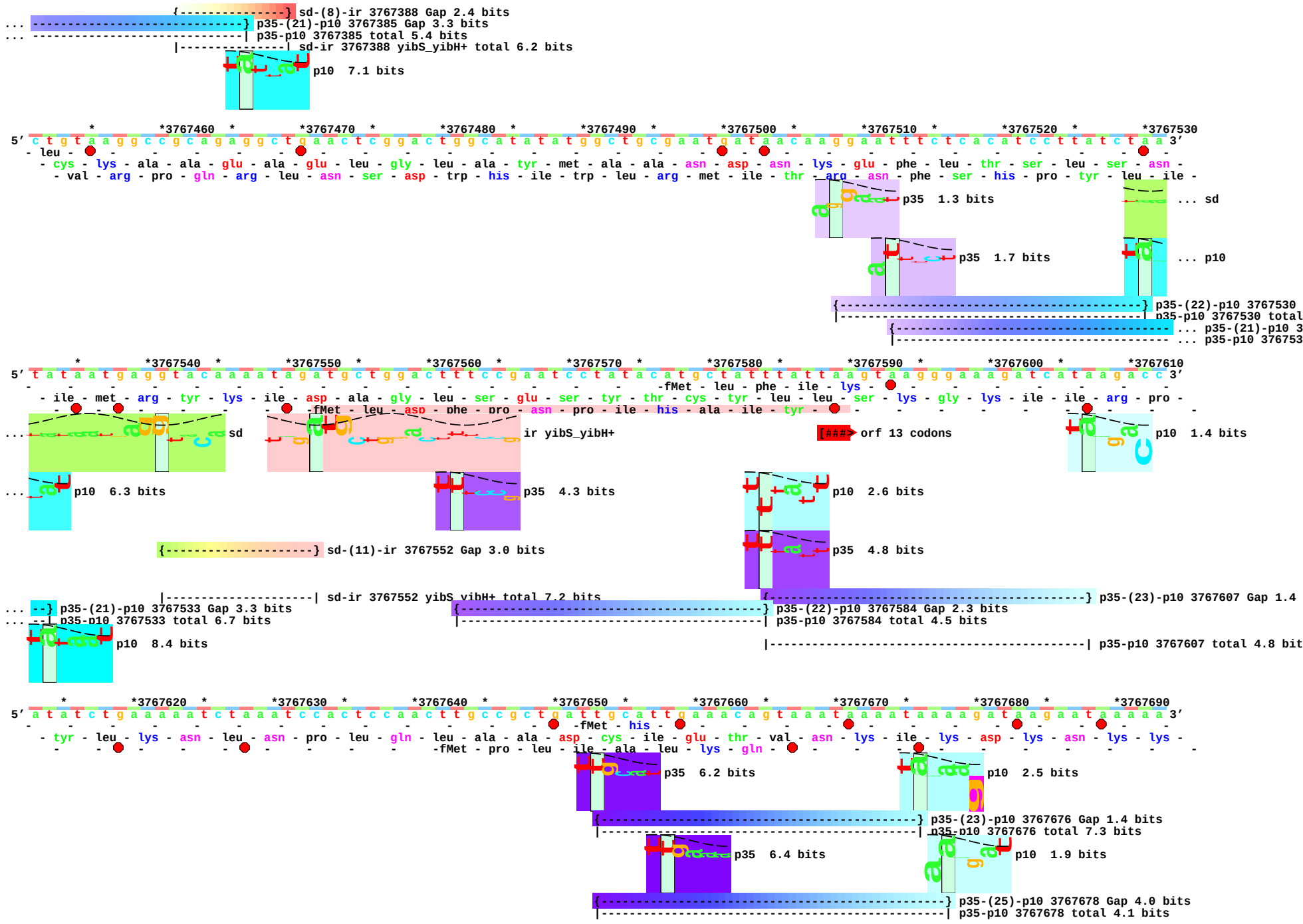
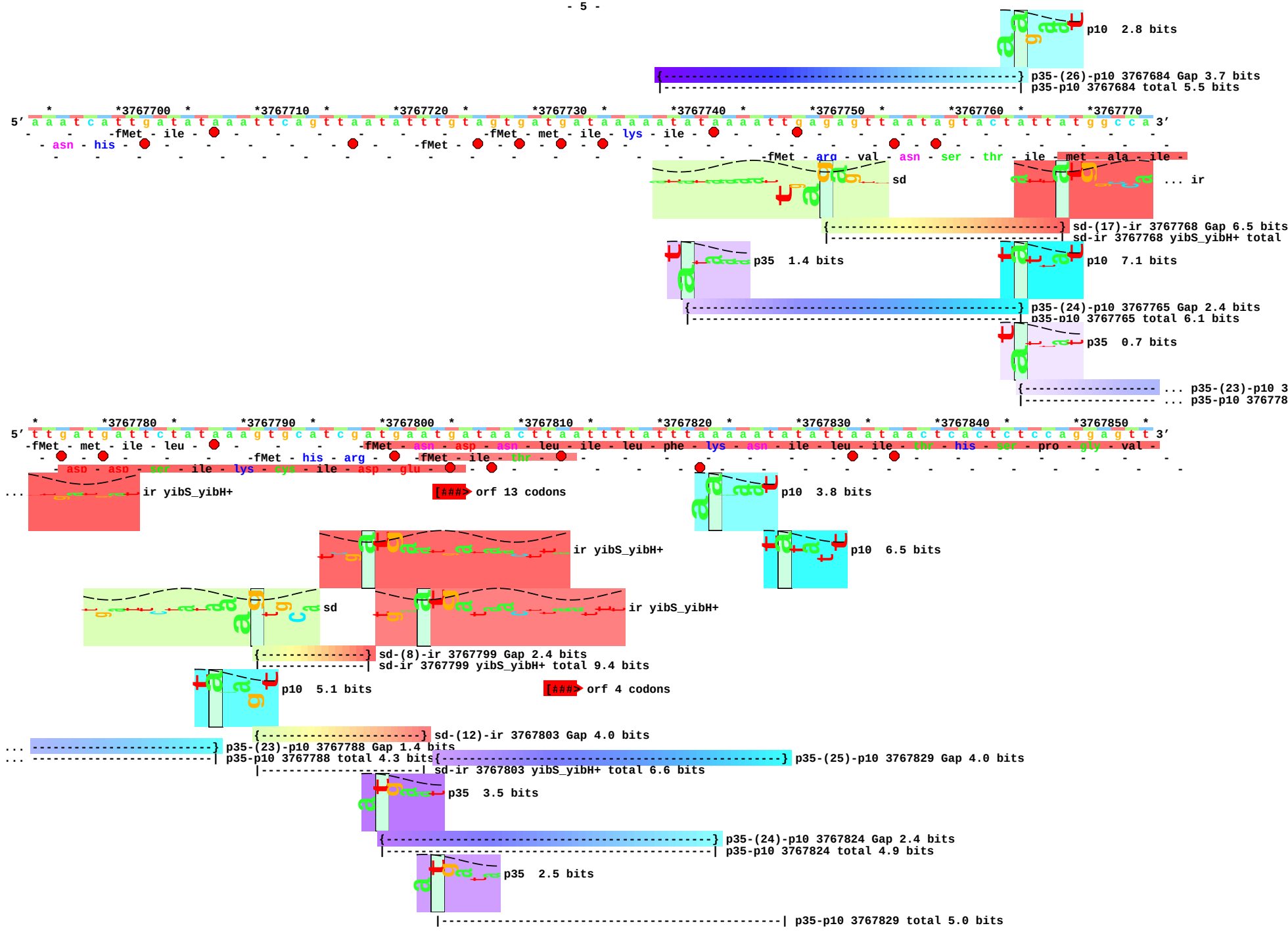
piece 1, NC_000913, yibS_yibH+, config: linear, direction: +, begin: 3766884, end: 3768285

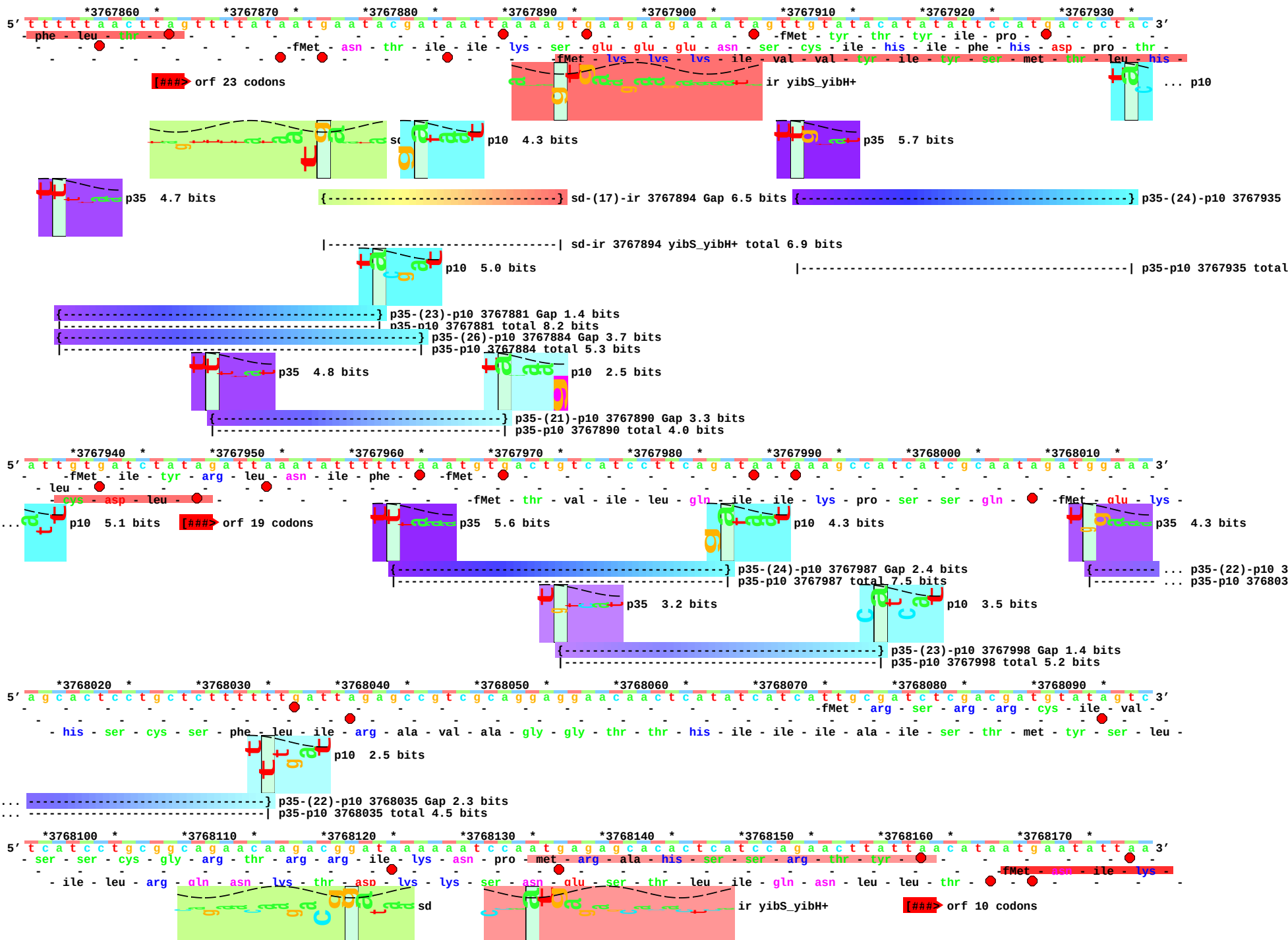


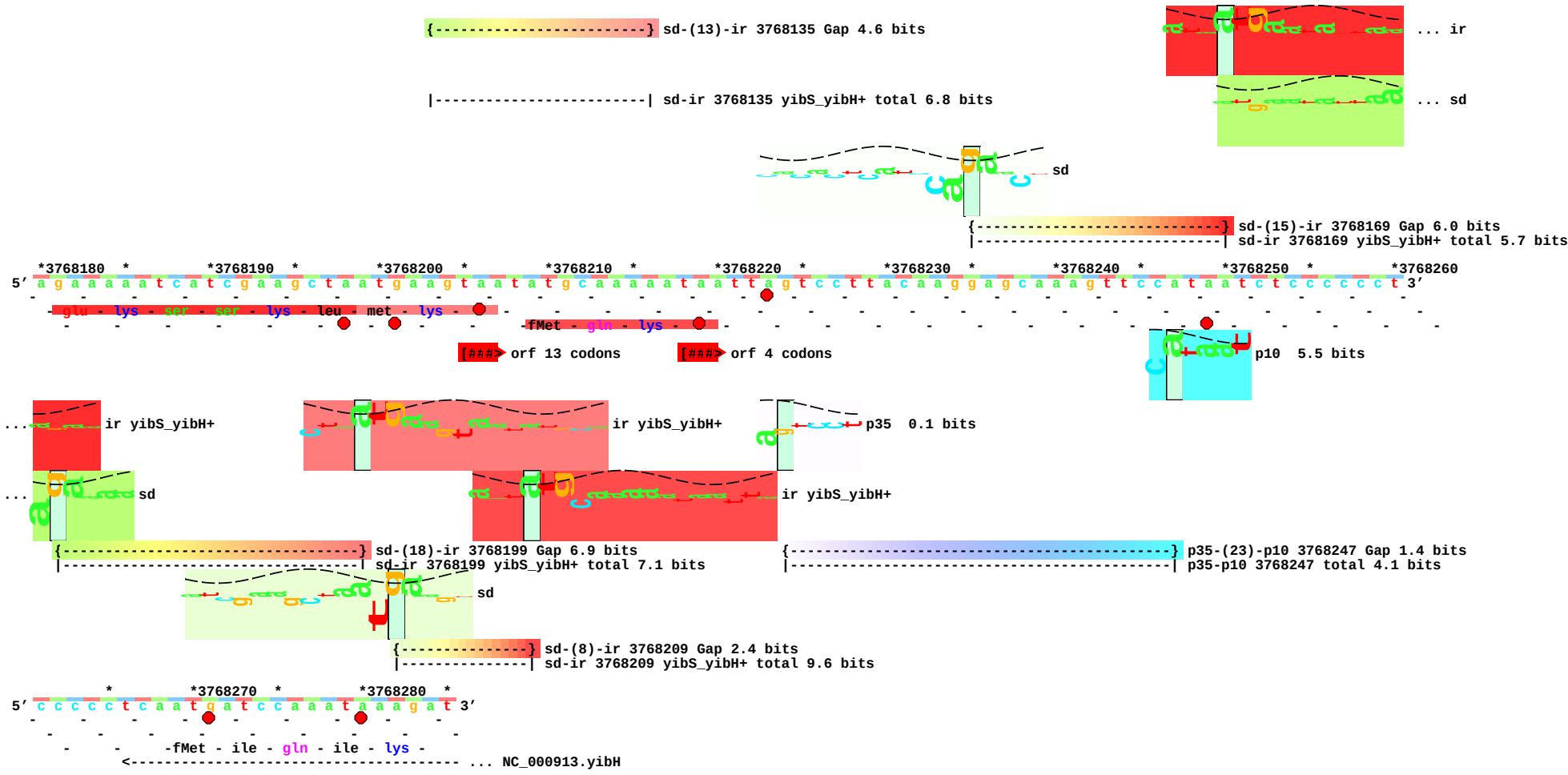

... ----------------------} p35-(22)-p10 3766976 Gap 2.3 bits
... ----------------------| p35-p10 3766976 total 5.7 bits
*3767050 * *3767060 * *3767070 * *3767080 * *3767090 * *3767100 * *3767110 * *3767120 *
5′ g a c c c g g g a g c a a g c a a t a g a a a a c c t g a c g g c a t a c g a t t a g t a c c g t c a g t t a a t a c a g g a a c t t a t a a t c g c a a t g g a 3′
- asp - pro - gly - ala - ser - asn - arg - lys - pro - asp - gly - ile - arg - leu - val - pro - ser - val - asn - thr - gly - thr - tyr - asn - arg - asn - gly -
- thr - arg - glu - gln - ala - ile - glu - asn - leu - thr - ala - tyr - asp - -fMet - asp -
... ir yibS_yibH+
[###> orf 17 codons
... ir
... ir yibS_yibH+
sd
p35 0.0 bits
{----------} sd-(15)-ir 3767122 Gap 6.0
|----------| sd-ir 3767122 yibS_yibH+ to
p10 8.4 bits
{----------} p35-(26)-p10 3767113 Gap 3.7 bits
|----------| p35-p10 3767113 total 4.7 bits
*3767130 * *3767140 * *3767150 * *3767160 * *3767170 * *3767180 * *3767190 * *3767200 *
5′ t t t t c a a t a c a t a g t t g t t t a a a c g c t t t t g g t c c g t c t t t a g g a c c t c g a t t c t g t t c c g a g g g t t g t a t a a c t g g t t t a 3′
- phe - ser - ile - his - ser - cys - leu - asn - ala - phe - gly - pro - ser - leu - gly - pro - arg - phe - cys - ser - glu - gly - cys - ile - thr - gly - leu -
- phe - gln - tyr - ile - val - val - -fMet - val - arg - leu -
-fMet - phe - lys - arg - phe - trp - ser - val - phe - arg - thr - ser - ile - leu - phe - arg - gly - leu - tyr - asn - trp - phe - ile -
... ir yibS_yibH+
[###> orf 9 codons
p10 0.3 bits
sd
p35 5.6 bits
{--------- ... sd-(9)-ir 3767
{----------} p35-(23)-p10 3767168 Gap 1.4 bits
|----------| p35-p10 3767168 total 4.5 bits
|--------- ... sd-ir 3767212
{---------- ... sd-(14)-ir 376
|--------- ... sd-ir 3767217
... sd
... p35
{----- ... p35-(22)-p10 3
|----- ... p35-p10 376722
*3767210 * *3767220 * *3767230 * *3767240 * *3767250 * *3767260 * *3767270 * *3767280 *
5′ t c t a a t g a c a t g c a a a a a t t a a a t g a g t t a a t a t t t t c a g a g c c a g a t a g c a c a t t a a c a g t t a c g g a c t a a a a a a t a t g g 3′
- ser - asn - asp - met - gln - lys - leu - asn - glu - leu - ile - phe - ser - glu - pro - asp - ser - thr - leu - thr - val - thr - asp -
-fMet - thr - cys - lys - asn - -fMet - ser -
-fMet - ala -
... ir yibS_yibH+
[###> orf 3 codons
[###> orf 21 codons {--- ... p35-(21)-p10 3
... --------} sd-(9)-ir 3767212 Gap 2.3 bits
p10 6.3 bits
sd
... ir

... --------| sd-ir 3767212 yibS_yibH+ total 9.7 bits
p10 5.2 bits
{--------------------} sd-(11)-ir 3767285 Gap 3.
... ------------------} sd-(14)-ir 3767217 Gap 4.9 bits
|--------------------| sd-ir 3767285 yibS_yibH+
... ------------------| sd-ir 3767217 yibS_yibH+ total 9.4 bits
... p35
... sd [###> orf 6 codons
|--- ... p35-p10 376730
... p35 3.3 bits
ir yibS_yibH+
... --} p35-(22)-p10 3767227 Gap 2.3 bits
... --| p35-p10 3767227 total 4.7 bits
ir yibS_yibH+
{--------------------} sd-(11)-ir 3767230 Gap 3.0 bits
|--------------------| sd-ir 3767230 yibS_yibH+ total 6.0 bits
p35 3.3 bits
p10 3.7 bits
{--} p35-(24)-p10 3767237 Gap 2.4 bits
|--| p35-p10 3767237 total 7.2 bits
p35 3.0 bits
{---} p35-(22)-p10 3767240 Gap 2.3 bits
|---| p35-p10 3767240 total 5.8 bits
*3767290 * *3767300 * *3767310 * *3767320 * *3767330 * *3767340 * *3767350 * *3767360 *
5′ c a a g g t t a t t a a c a a t t g t a t t t t t t c t c t a t t t c t g c g a g t g c a g t t a c t g c a a g a c a a t t t c a g a g a g a g t t a g a t t t 3′
- - - - - - -fMet - tyr - phe - phe - leu - tyr - phe - cys - glu - cys - ser - tyr - cys - lys - thr - ile - ser - glu - arg - val - arg - phe -
- - - - - -


sd-(8)-ir 3767388 Gap 2.4 bits
p35-(21)-p10 3767385 Gap 3.3 bits
p35-p10 3767385 total 5.4 bits
sd-ir 3767388 yibS_yibH+ total 6.2 bits
p10 7.1 bits
*3767460 *3767470 *3767480 *3767490 *3767500 *3767510 *3767520 *3767530
5' c t g t a a g g c c g c a g a g g c t g a a c t c g g a c t g g c a t a t a t g g c t g c g a a t g a t a a c a a g g a a t t t c t c a c a t c c t t a t c t a a 3'
- leu - cys - lys - ala - ala - glu - ala - glu - leu - gly - leu - ala - tyr - met - ala - ala - asn - asp - asn - lys - glu - phe - leu - thr - ser - leu - ser - asn -
- val - arg - pro - gln - arg - leu - asn - ser - asp - trp - his - ile - trp - leu - arg - met - ile - thr - arg - asn - phe - ser - his - pro - tyr - leu - ile -
p35 1.3 bits
... sd
p35 1.7 bits
... p10
p35-(22)-p10 3767530
p35-p10 3767530 total
... p35-(21)-p10 3
... p35-p10 376753
*3767540 *3767550 *3767560 *3767570 *3767580 *3767590 *3767600 *3767610
5' t a t a a t g a g g t a c a a a a t a g a t g c t g g a c t t t c c g a a t c c t a t a c a t g c t a t t t a t t a a g t a a g g g a a a g a t c a t a a g a c c 3'
-fMet - leu - phe - ile - lys -
- ile - met - arg - tyr - lys - ile - asp - ala - gly - leu - ser - glu - ser - tyr - thr - cys - tyr - leu - leu - ser - lys - gly - lys - ile - ile - arg - pro -
-fMet - leu - asp - phe - pro - asn - pro - ile - his - ala - ile - tyr -
sd
ir yibS_yibH+
[###> orf 13 codons
p10 1.4 bits
p10 6.3 bits
p35 4.3 bits
p10 2.6 bits
sd-(11)-ir 3767552 Gap 3.0 bits
p35 4.8 bits
sd-ir 3767552 yibS_yibH+ total 7.2 bits
p35-(23)-p10 3767607 Gap 1.4
p35-(21)-p10 3767533 Gap 3.3 bits
p35-(22)-p10 3767584 Gap 2.3 bits
p35-p10 3767533 total 6.7 bits
p35-p10 3767584 total 4.5 bits
p10 8.4 bits
p35-p10 3767607 total 4.8 bit
*3767620 *3767630 *3767640 *3767650 *3767660 *3767670 *3767680 *3767690
5' a t a t c t g a a a a a t c t a a a t c c a c t c c a a c t t g c c g c t g a t t g c a t t g a a a c a g t a a a t a a a a t a a a a g a t a a g a a t a a a a a 3'
-fMet - his -
- tyr - leu - lys - asn - leu - asn - pro - leu - gln - leu - ala - ala - asp - cys - ile - glu - thr - val - asn - lys - ile - lys - asp - lys - asn - lys - lys -
-fMet - pro - leu - ile - ala - leu - lys - gln -
p35 6.2 bits
p10 2.5 bits
p35-(23)-p10 3767676 Gap 1.4 bits
p35-p10 3767676 total 7.3 bits
p35 6.4 bits
p10 1.9 bits
p35-(25)-p10 3767678 Gap 4.0 bits
p35-p10 3767678 total 4.1 bits


p10 2.8 bits
p35-(26)-p10 3767684 Gap 3.7 bits
p35-p10 3767684 total 5.5 bits
*3767700 *3767710 *3767720 *3767730 *3767740 *3767750 *3767760 *3767770
5' aaatcattgatataaattcagttaatatttgtagtgatgataaaatataaaattgagagttaatagtactattatggcca 3'
-fMet - ile - -fMet - met - ile - lys - ile -
- asn - his - -fMet - -fMet - arg - val - asn - ser - thr - ile - met - ala - ile -
sd
... ir
sd-(17)-ir 3767768 Gap 6.5 bits
sd-ir 3767768 yibS_yibH+ total
p35 1.4 bits
p10 7.1 bits
p35-(24)-p10 3767765 Gap 2.4 bits
p35-p10 3767765 total 6.1 bits
p35 0.7 bits
... p35-(23)-p10 3
... p35-p10 376778
*3767780 *3767790 *3767800 *3767810 *3767820 *3767830 *3767840 *3767850
5' ttgatgattctataaagtgcatcgatgaatgataacttaatttttatttaaaaatatattaataactcactctccaggagttt 3'
-fMet - met - ile - leu - -fMet - asn - asp - asn - leu - ile - leu - phe - lys - asn - ile - leu - ile - thr - his - ser - pro - gly - val -
- asp - asp - ser - ile - lys - cys - ile - asp - glu - -fMet - his - arg - -fMet - ile - thr -
... ir yibS_yibH+
[###> orf 13 codons
p10 3.8 bits
ir yibS_yibH+
p10 6.5 bits
sd
ir yibS_yibH+
sd-(8)-ir 3767799 Gap 2.4 bits
sd-ir 3767799 yibS_yibH+ total 9.4 bits
p10 5.1 bits
[###> orf 4 codons
sd-(12)-ir 3767803 Gap 4.0 bits
... p35-(23)-p10 3767788 Gap 1.4 bits
... p35-p10 3767788 total 4.3 bits
p35-(25)-p10 3767829 Gap 4.0 bits
sd-ir 3767803 yibS_yibH+ total 6.6 bits
p35 3.5 bits
p35-(24)-p10 3767824 Gap 2.4 bits
p35-p10 3767824 total 4.9 bits
p35 2.5 bits
p35-p10 3767829 total 5.0 bits


*3767860 *3767870 *3767880 *3767890 *3767900 *3767910 *3767920 *3767930 *
5′ t t t t t a a c t t a g t t t t a t a a t g a a t a c g a t a a t t a a a a g t g a a g a a g a a a a t a g t t g t a t a c a t a t a t t c c a t g a c c c t a c 3′
- phe - leu - thr - -fMet - tyr - thr - tyr - ile - pro -
-fMet - asn - thr - ile - ile - lys - ser - glu - glu - glu - asn - ser - cys - ile - his - ile - phe - his - asp - pro - thr -
-fMet - lys - lys - lys - ile - val - val - tyr - ile - tyr - ser - met - thr - leu - his -
[###> orf 23 codons
ir yibS_yibH+
... p10
p10 4.3 bits
p35 5.7 bits
p35 4.7 bits
{----------} sd-(17)-ir 3767894 Gap 6.5 bits
{----------} p35-(24)-p10 3767935
|----------| sd-ir 3767894 yibS_yibH+ total 6.9 bits
p10 5.0 bits
|----------| p35-p10 3767935 total
{----------} p35-(23)-p10 3767881 Gap 1.4 bits
|----------| p35-p10 3767881 total 8.2 bits
{----------} p35-(26)-p10 3767884 Gap 3.7 bits
|----------| p35-p10 3767884 total 5.3 bits
p35 4.8 bits
p10 2.5 bits
{----------} p35-(21)-p10 3767890 Gap 3.3 bits
|----------| p35-p10 3767890 total 4.0 bits
*3767940 *3767950 *3767960 *3767970 *3767980 *3767990 *3768000 *3768010 *
5′ a t t g t g a t c t a t a g a t t a a a t a t t t t t t a a a t g t g a c t g t c a t c c t t c a g a t a a t a a a g c c a t c a t c g c a a t a g a t g g a a a 3′
- -fMet - ile - tyr - arg - leu - asn - ile - phe - -fMet -
- leu -
- cys - asp - leu -
-fMet - thr - val - ile - leu - gln - ile - ile - lys - pro - ser - ser - gln - -fMet - glu - lys -
... p10 5.1 bits [###> orf 19 codons
p35 5.6 bits
p10 4.3 bits
p35 4.3 bits
{----------} p35-(24)-p10 3767987 Gap 2.4 bits
|----------| p35-p10 3767987 total 7.5 bits
{--------- ... p35-(22)-p10 3
|--------- ... p35-p10 376803
p35 3.2 bits
p10 3.5 bits
{----------} p35-(23)-p10 3767998 Gap 1.4 bits
|----------| p35-p10 3767998 total 5.2 bits
*3768020 *3768030 *3768040 *3768050 *3768060 *3768070 *3768080 *3768090 *
5′ a g c a c t c c t g c t c t t t t t t g a t t a g a g c c g t c g c a g g a g g a a c a a c t c a t c a t c a t t g c g a t c t c g a c g a t g t a t a g t c 3′
-fMet - arg - ser - arg - arg - cys - ile - val -
- his - ser - cys - ser - phe - leu - ile - arg - ala - val - ala - gly - gly - thr - thr - his - ile - ile - ile - ala - ile - ser - thr - met - tyr - ser - leu -
p10 2.5 bits
... {----------} p35-(22)-p10 3768035 Gap 2.3 bits
... |----------| p35-p10 3768035 total 4.5 bits
*3768100 *3768110 *3768120 *3768130 *3768140 *3768150 *3768160 *3768170 *
5′ t c a t c c t g c g g c a g a a c a a g a c g g a t a a a a a a t c c a a t g a g a g c a c a c t c a t c c a g a a c t t a t t a a c a t a a t g a a t a t t a a 3′
- ser - ser - cys - gly - arg - thr - arg - arg - ile - lys - asn - pro - met - arg - ala - his - ser - ser - arg - thr - tyr -
-fMet - asn - ile - lys -
- ile - leu - arg - gln - asn - lys - thr - asp - lys - lys - ser - asn - glu - ser - thr - leu - ile - gln - asn - leu - leu - thr -
sd
ir yibS_yibH+
[###> orf 10 codons


{----------} sd-(13)-ir 3768135 Gap 4.6 bits
|----------| sd-ir 3768135 yibS_yibH+ total 6.8 bits
... ir
... sd
sd
{----------} sd-(15)-ir 3768169 Gap 6.0 bits
|----------| sd-ir 3768169 yibS_yibH+ total 5.7 bits
*3768180 *3768190 *3768200 *3768210 *3768220 *3768230 *3768240 *3768250 *3768260
5' a g a a a a a t c a t c g a a g c t a a t g a a g t a a t a t g c a a a a a t a a t t a g t c c t t a c a a g g a g c a a a g t t c c a t a a t c t c c c c c t 3'
glu - lys - ser - ser - lys - leu - met - lys -
fMet - gln - lys -
[###> orf 13 codons
[###> orf 4 codons
p10 5.5 bits
... ir yibS_yibH+
ir yibS_yibH+
p35 0.1 bits
... sd
ir yibS_yibH+
{----------} sd-(18)-ir 3768199 Gap 6.9 bits
|----------| sd-ir 3768199 yibS_yibH+ total 7.1 bits
{----------} p35-(23)-p10 3768247 Gap 1.4 bits
|----------| p35-p10 3768247 total 4.1 bits
sd
{----------} sd-(8)-ir 3768209 Gap 2.4 bits
|----------| sd-ir 3768209 yibS_yibH+ total 9.6 bits
* *3768270 * *3768280 *
5' c c c c c t c a a t g a t c c a a a t a a a g a t 3'
-fMet - ile - gln - ile - lys -
<---------- ... NC_000913.yibH