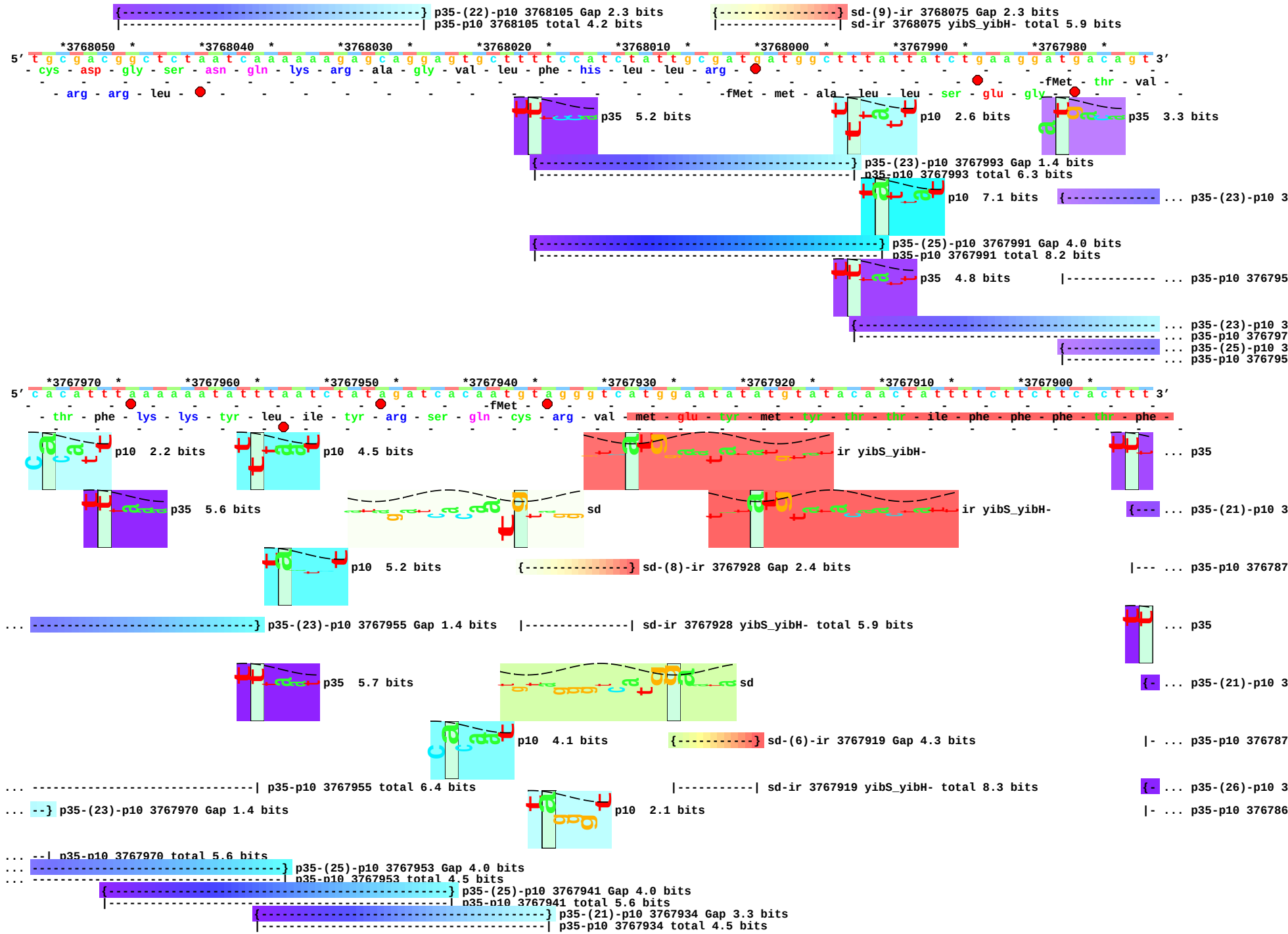
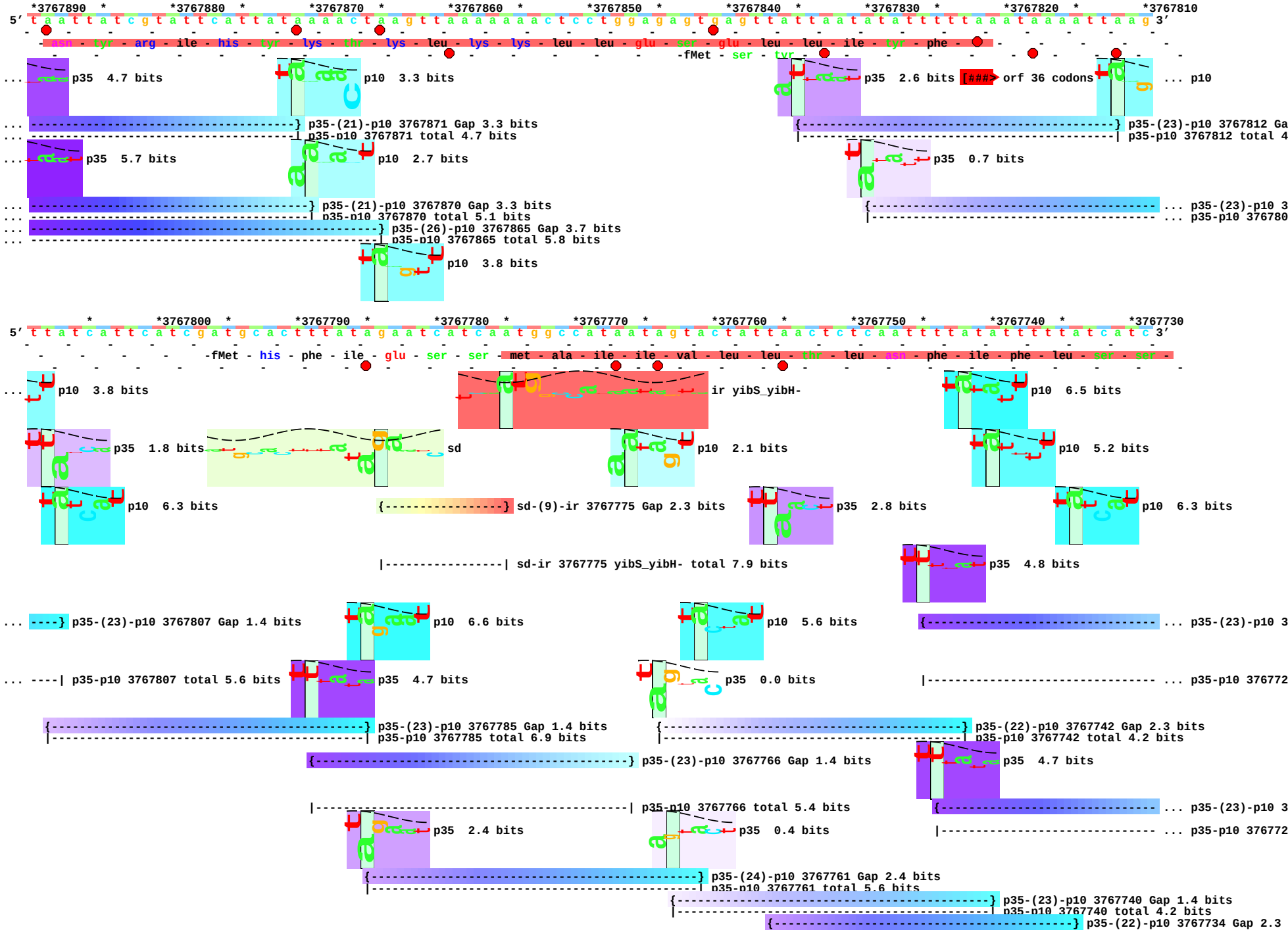
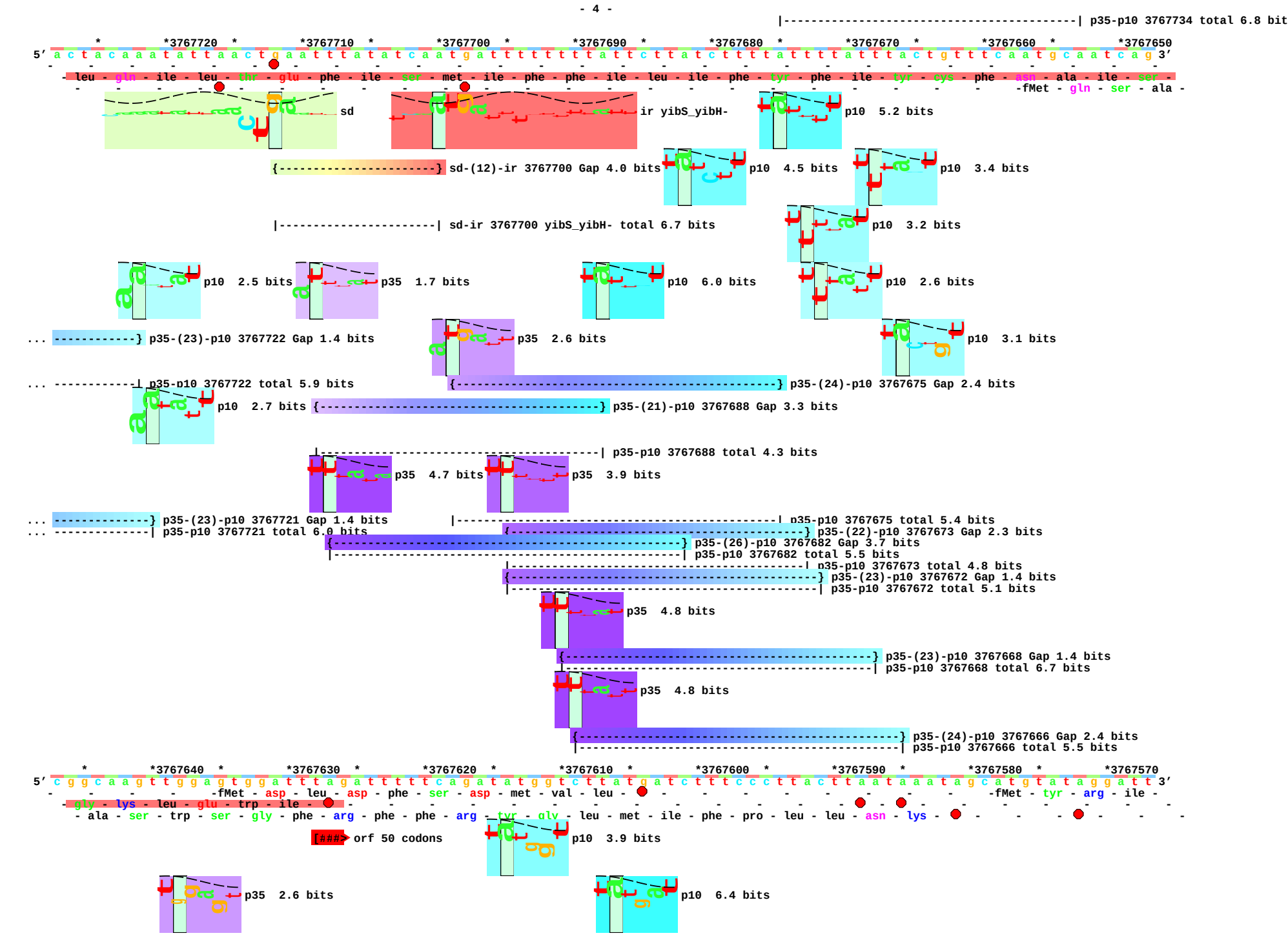
piece 1, NC_000913, yibS_yibH-, config: linear, direction: -, begin: 3768295, end: 3766894


p35-(22)-p10 3768105 Gap 2.3 bits
p35-p10 3768105 total 4.2 bits
sd-(9)-ir 3768075 Gap 2.3 bits
sd-ir 3768075 yibS_yibH- total 5.9 bits
*3768050 *3768040 *3768030 *3768020 *3768010 *3768000 *3767990 *3767980 *
5′ t g c g a c g g c t c t a a t c a a a a a a g a g c a g g a g t g c t t t t c c a t c t a t t g c g a t g a t g g c t t t a t t a t c t g a a g g a t g a c a g t 3′
- cys - asp - gly - ser - asn - gln - lys - arg - ala - gly - val - leu - phe - his - leu - leu - arg -
- arg - arg - leu -
-fMet - thr - val -
-fMet - met - ala - leu - leu - ser - glu - gly -
p35 5.2 bits
p10 2.6 bits
p35 3.3 bits
p35-(23)-p10 3767993 Gap 1.4 bits
p35-p10 3767993 total 6.3 bits
p10 7.1 bits
... p35-(23)-p10 3
p35-(25)-p10 3767991 Gap 4.0 bits
p35-p10 3767991 total 8.2 bits
p35 4.8 bits
... p35-p10 376795
... p35-(23)-p10 3
... p35-p10 376797
... p35-(25)-p10 3
... p35-p10 376795
*3767970 *3767960 *3767950 *3767940 *3767930 *3767920 *3767910 *3767900 *
5′ c a c a t t t a a a a a a t a t t t a a t c t a t a g a t c a c a a t g t a g g g t c a t g g a a t a t a t g t a t a c a a c t a t t t t c t t c t t c a c t t t 3′
- thr - phe - lys - lys - tyr - leu - ile - tyr - arg - ser - gln - cys - arg - val - met - glu - tyr - met - tyr - thr - thr - ile - phe - phe - phe - thr - phe -
-fMet -
p10 2.2 bits
p10 4.5 bits
ir yibS_yibH-
... p35
p35 5.6 bits
sd
ir yibS_yibH-
... p35-(21)-p10 3
p10 5.2 bits
sd-(8)-ir 3767928 Gap 2.4 bits
... p35-p10 376787
... p35-(23)-p10 3767955 Gap 1.4 bits
sd-ir 3767928 yibS_yibH- total 5.9 bits
... p35
p35 5.7 bits
sd
... p35-(21)-p10 3
p10 4.1 bits
sd-(6)-ir 3767919 Gap 4.3 bits
... p35-p10 376787
... p35-p10 3767955 total 6.4 bits
sd-ir 3767919 yibS_yibH- total 8.3 bits
... p35-(26)-p10 3
... p35-(23)-p10 3767970 Gap 1.4 bits
p10 2.1 bits
... p35-p10 376786
... p35-p10 3767970 total 5.6 bits
... p35-(25)-p10 3767953 Gap 4.0 bits
... p35-p10 3767953 total 4.5 bits
p35-(25)-p10 3767941 Gap 4.0 bits
p35-p10 3767941 total 5.6 bits
p35-(21)-p10 3767934 Gap 3.3 bits
p35-p10 3767934 total 4.5 bits

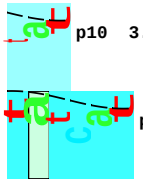

*3767890 * *3767880 * *3767870 * *3767860 * *3767850 * *3767840 * *3767830 * *3767820 * *3767810
5′ t a a t t a t c g t a t t c a t t a t a a a a c t a a g t t a a a a a a a c t c c t g g a g a g t g a g t t a t t a a t a t a t t t t t a a a t a a a a t t a a g 3′
- asn - tyr - arg - ile - his - tyr - lys - thr - lys - leu - lys - lys - leu - leu - glu - ser - glu - leu - leu - ile - tyr - phe -
-fMet - ser - tyr -
... p35 4.7 bits p10 3.3 bits p35 2.6 bits [###> orf 36 codons ... p10
... } p35-(21)-p10 3767871 Gap 3.3 bits
... | p35-p10 3767871 total 4.7 bits
... p35 5.7 bits p10 2.7 bits
... } p35-(21)-p10 3767870 Gap 3.3 bits
... | p35-p10 3767870 total 5.1 bits
... } p35-(26)-p10 3767865 Gap 3.7 bits
... | p35-p10 3767865 total 5.8 bits
p10 3.8 bits
{ p35-(23)-p10 3767812 Ga
| p35-p10 3767812 total 4
p35 0.7 bits
{ ... p35-(23)-p10 3
| ... p35-p10 376780
*3767800 * *3767790 * *3767780 * *3767770 * *3767760 * *3767750 * *3767740 * *3767730
5′ t t a t c a t t c a t c g a t g c a c t t t a t a g a a t c a t c a a t g g c c a t a a t a g t a c t a t t a a c t c t c a a t t t t a t a t t t t a t c a t c 3′
-fMet - his - phe - ile - glu - ser - ser - met - ala - ile - ile - val - leu - leu - thr - leu - asn - phe - ile - phe - leu - ser - ser -
... p10 3.8 bits
ir yibS_yibH-
p10 6.5 bits
p35 1.8 bits
sd
p10 2.1 bits
p10 5.2 bits
p10 6.3 bits
{ sd-(9)-ir 3767775 Gap 2.3 bits
p35 2.8 bits
p10 6.3 bits
| sd-ir 3767775 yibS_yibH- total 7.9 bits
p35 4.8 bits
... } p35-(23)-p10 3767807 Gap 1.4 bits
p10 6.6 bits
p10 5.6 bits
{ ... p35-(23)-p10 3
... | p35-p10 3767807 total 5.6 bits
p35 4.7 bits
p35 0.0 bits
| ... p35-p10 376772
{ p35-(23)-p10 3767785 Gap 1.4 bits
| p35-p10 3767785 total 6.9 bits
{ p35-(22)-p10 3767742 Gap 2.3 bits
| p35-p10 3767742 total 4.2 bits
{ p35-(23)-p10 3767766 Gap 1.4 bits
p35 4.7 bits
| p35-p10 3767766 total 5.4 bits
{ ... p35-(23)-p10 3
p35 2.4 bits
p35 0.4 bits
| ... p35-p10 376772
{ p35-(24)-p10 3767761 Gap 2.4 bits
| p35-p10 3767761 total 5.6 bits
{ p35-(23)-p10 3767740 Gap 1.4 bits
| p35-p10 3767740 total 4.2 bits
{ p35-(22)-p10 3767734 Gap 2.3


|----------| p35-p10 3767734 total 6.8 bit
*3767720 *3767710 *3767700 *3767690 *3767680 *3767670 *3767660 *3767650
5' a c t a c a a a t a t t a a c t g a a t t t a t a t c a a t g a t t t t t t t t a t t c t t a t c t t t t a t t t t a t t t a c t g t t t c a a t g c a a t c a g 3'
- leu - gln - ile - leu - thr - glu - phe - ile - ser - met - ile - phe - phe - ile - leu - ile - phe - tyr - phe - ile - tyr - cys - phe - asn - ala - ile - ser -
-fMet - gln - ser - ala -
sd
ir yibS_yibH-
p10 5.2 bits
{----------} sd-(12)-ir 3767700 Gap 4.0 bits
p10 4.5 bits
p10 3.4 bits
|----------| sd-ir 3767700 yibS_yibH- total 6.7 bits
p10 3.2 bits
p10 2.5 bits
p35 1.7 bits
p10 6.0 bits
p10 2.6 bits
... ----------} p35-(23)-p10 3767722 Gap 1.4 bits
p35 2.6 bits
p10 3.1 bits
... ----------| p35-p10 3767722 total 5.9 bits
{----------} p35-(24)-p10 3767675 Gap 2.4 bits
p10 2.7 bits
{----------} p35-(21)-p10 3767688 Gap 3.3 bits
|----------| p35-p10 3767688 total 4.3 bits
p35 4.7 bits
p35 3.9 bits
... ----------} p35-(23)-p10 3767721 Gap 1.4 bits
|----------| p35-p10 3767675 total 5.4 bits
... ----------| p35-p10 3767721 total 6.0 bits
{----------} p35-(22)-p10 3767673 Gap 2.3 bits
{----------} p35-(26)-p10 3767682 Gap 3.7 bits
|----------| p35-p10 3767682 total 5.5 bits
|----------| p35-p10 3767673 total 4.8 bits
{----------} p35-(23)-p10 3767672 Gap 1.4 bits
|----------| p35-p10 3767672 total 5.1 bits
p35 4.8 bits
{----------} p35-(23)-p10 3767668 Gap 1.4 bits
|----------| p35-p10 3767668 total 6.7 bits
p35 4.8 bits
{----------} p35-(24)-p10 3767666 Gap 2.4 bits
|----------| p35-p10 3767666 total 5.5 bits
*3767640 *3767630 *3767620 *3767610 *3767600 *3767590 *3767580 *3767570
5' c g g c a a g t t g g a g t g g a t t t a g a t t t t t t c a g a t a t g g t c t t a t g a t c t t t c c c t t a c t t a a t a a a t a g c a t g t a t a g g a t t 3'
-fMet - asp - leu - asp - phe - ser - asp - met - val - leu -
-fMet - tyr - arg - ile -
- gly - lys - leu - glu - trp - ile -
- ala - ser - trp - ser - gly - phe - arg - phe - phe - arg - tyr - gly - leu - met - ile - phe - pro - leu - leu - asn - lys -
[###> orf 50 codons
p10 3.9 bits
p35 2.6 bits
p10 6.4 bits

p35-(24)-p10 3767614 Gap 2.4 bits
p35-p10 3767614 total 4.1 bits
p35 3.7 bits
p35-(23)-p10 3767606 Gap 1.4 bits
p35-p10 3767606 total 8.7 bits
*3767560 *3767550 *3767540 *3767530 *3767520 *3767510 *3767500 *3767490
5′ c g g a a a g t c c a g c a t c t a t t t g t a c c t c a t t a t a t t a g a t a a g g a t g t g a g a a a t t c c t t g t t a t c a t t c g c a g c c a t a t 3′
- arg - lys - val - gln - his - leu - phe - cys - thr - ser - leu - tyr - - - -fMet - - - - - - - - - - - - - - - - - -
- - - - - - - -fMet - tyr - leu - ile - ile - leu - asp - lys - asp - val - arg - asn - ser - leu - leu - ser - phe - ala - ala - ile - tyr -
*3767480 *3767470 *3767460 *3767450 *3767440 *3767430 *3767420 *3767410
5′ a t g c c a g t c c g a g t t c a g c c t c t g c g g c c t t a c a g g c a a a a t a g c t t a g t g a a c a c g c t t t t c g t c c c t c t t t a g t a c t g g 3′
-fMet - pro - val - arg - val - gln - pro - leu - arg - pro - tyr - arg - gln - asn - ser - leu - val - asn - thr - leu - phe - val - pro - leu - - - - -
- ala - ser - pro - ser - ser - ala - ser - ala - ala - leu - gln - ala - lys - - - - - - - - - - - - - - - - - - - -
p35 3.8 bits
... p35-(25)-p10 3
... p35-p10 376738
p35 0.4 bits
... p35-(24)-p10 3
... p35-p10 376738
*3767400 *3767390 *3767380 *3767370 *3767360 *3767350 *3767340 *3767330
5′ c t g a t a t t a g t g c c c a t a a t a t t g c t t t g t c t g c c a a a t c t a a c t c t c t c t g a a a t t g t c t t g c a g t a a c t g c a c t c g c a g 3′
- - - -fMet - pro - ile - ile - leu - leu - cys - leu - pro - asn - leu - thr - leu - ser - glu - ile - val - leu - gln - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

p35 6.2 bits
p10 2.7 bits
p35-(26)-p10 3767195 Gap 3.7 bits
p35-p10 3767195 total 5.1 bits
*3767160 *3767150 *3767140 *3767130 *3767120 *3767110 *3767100 *3767090 *
5' g g a c c a a a a g c g t t t a a a c a a c t a t g t a t t g a a a a t c c a t t g c g a t t a t a a g t t c c t g t a t t a a c t g a c g g t a c t a a t c g t 3'
- gly - pro - lys - ala - phe - lys - gln - leu - cys - ile - glu - asn - pro - leu - arg - leu -
-fMet - lys - ile - his - cys - asp - tyr - lys - phe - leu - tyr -
-fMet - tyr -
p35 2.6 bits
p10 3.3 bits
p35-(23)-p10 3767114 Gap 1.4 bits
p35-p10 3767114 total 4.4 bits
p35 2.7 bits
p10 3.8 bits
p35-(24)-p10 3767112 Gap 2.4 bits
p35-p10 3767112 total 4.1 bits
*3767080 *3767070 *3767060 *3767050 *3767040 *3767030 *3767020 *3767010 *3767000
5' a t g c c g t c a g g t t t t c t a t t g c t t g c t c c c g g g t c a t t a a c a t t c c a a c t c c a t a g g c c t t g a g g t a t t g g c c a t c t a t t t 3'
-fMet - pro - ser - gly - phe - leu - leu - leu - ala - pro - gly - ser - leu - thr - phe - gln - leu - his - arg - pro -
-fMet - leu - pro - gly - his -
-fMet - ala - ile - tyr - leu -
-fMet - arg - tyr - trp - pro - ser - ile - tyr -
p35 4.8 bits
p10 5.6 bits
p35 3.9 bits
p35-(26)-p10 3767042 Gap 3.7 bits
p35-p10 3767042 total 6.6 bits
... p35-(22)-p10 3
... p35-p10 376698
... p35
... p35-(21)-p10 3
... p35-p10 376698
... p35-(24)-p10 3
... p35-p10 376697
* *3766990 * *3766980 * *3766970 * *3766960 * *3766950 * *3766940 * *3766930 * *3766920
5' a t a a a t g t g t a c a a c g g g a t t a t t t t a c a t t g c a t a t t a t t a c c a g a a g c g a c t g g a a t a c t a a g c a c a t c a t a a a a a t 3'
-fMet - tyr - asn - gly - asp - tyr - phe - tyr - ile - ala - tyr - tyr - tyr - gln - lys - arg - leu - glu - tyr -
-fMet - cys - thr - thr - gly - ile - ile - phe - thr - leu - his - ile - ile - thr - arg - ser - asp - trp - asn - thr - lys - his - ile - ile - lys - ile -
- lys - cys - val - gln - arg - gly - leu - phe - leu - his - cys - ile - leu - leu - pro - glu - ala - thr - gly - ile - leu - ser - thr - ser -
p10 2.7 bits
p10 5.1 bits
p35 4.4 bits
... p10
... p35-(22)-p10 3766989 Gap 2.3 bits
... p35-p10 3766989 total 4.3 bits
p35-(23)-p10 3766920
p35-p10 3766920 total
... p35 4.7 bits
p10 3.0 bits
... p35-(26)-p10 3
... p35-(21)-p10 3766980 Gap 3.3 bits
... p35-p10 3766980 total 4.4 bits
... p35-(24)-p10 3766977 Gap 2.4 bits
... p35-p10 3766977 total 7.5 bits
... p35-p10 376691
p35 0.7 bits
p10 5.2 bits
p35-(23)-p10 3766971 Gap 1.4 bits
p35-p10 3766971 total 4.3 bits
* *3766910 * *3766900 *
5' t a t c a t c a c a t g g t a t a t c t g a a a c 3'

```
   -     -     -     -fMet - val - tyr - leu - lys -
     - ile - ile - thr - trp - tyr - ile -  -     -
       -     -     -     -     -     -     -     -
```



```
... __ p10  3.3 bits
```



```
p10  6.3 bits

... --} p35-(26)-p10 3766917 Gap 3.7 bits
... --| p35-p10 3766917 total 7.1 bits
```