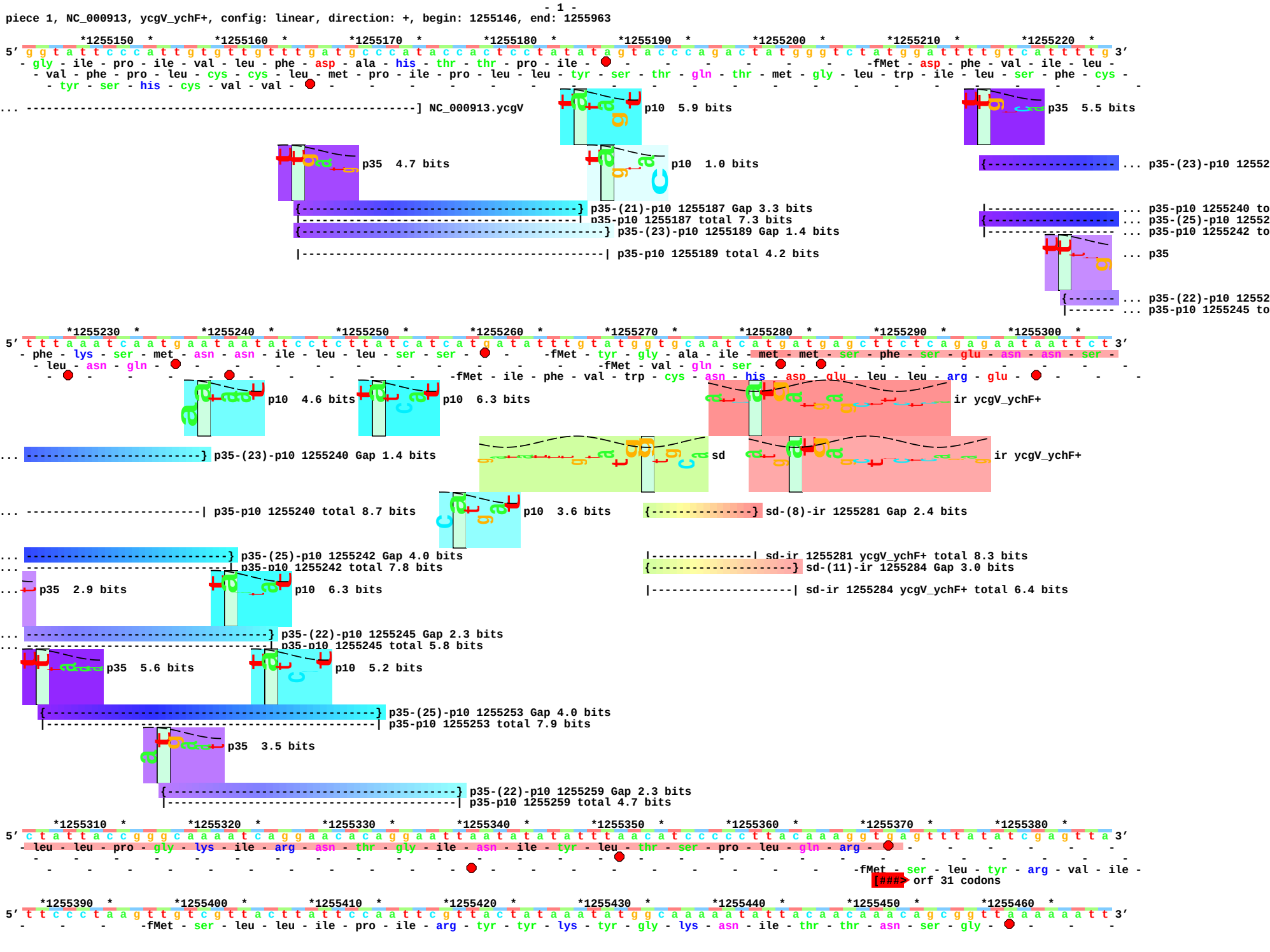
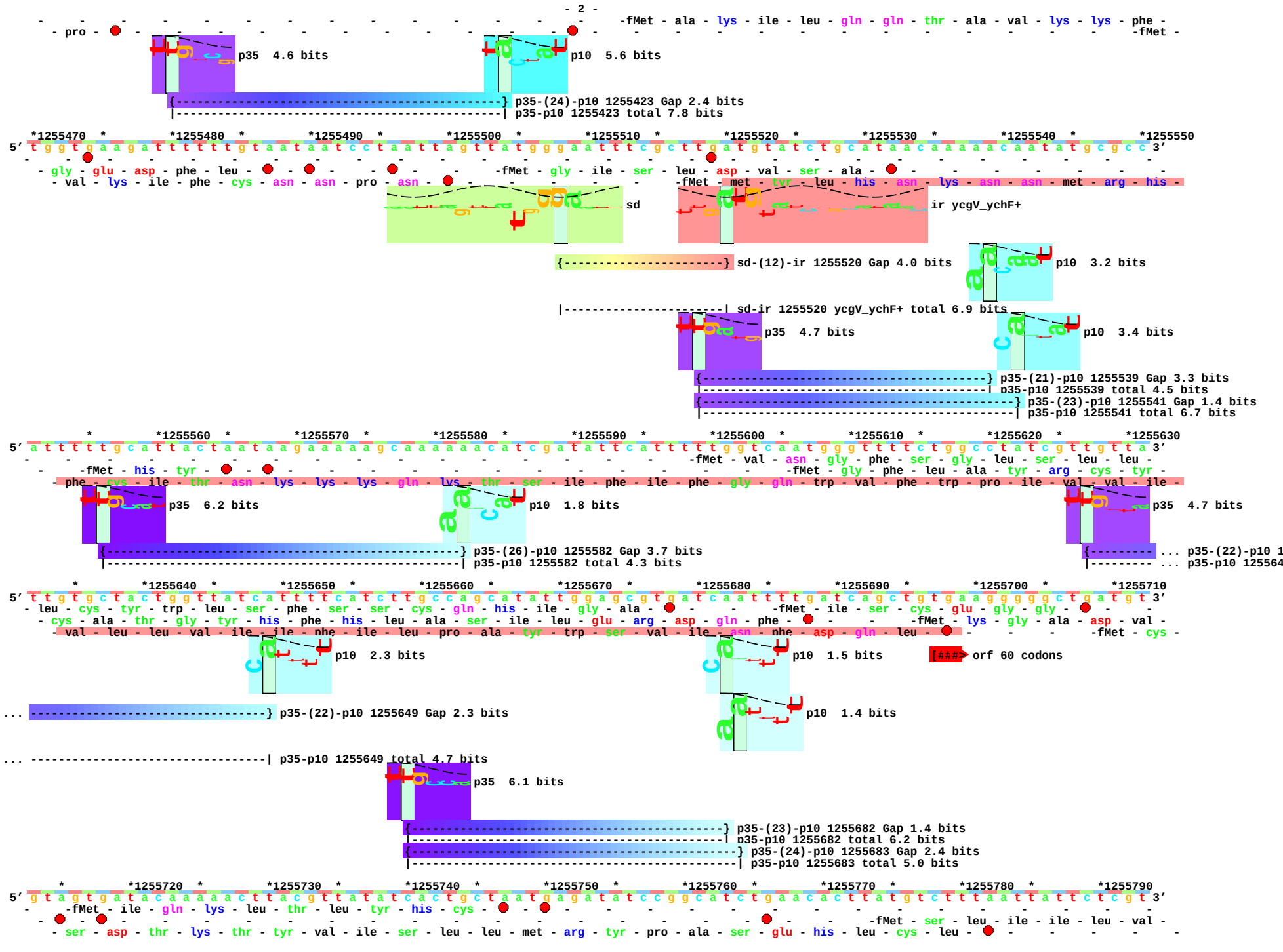
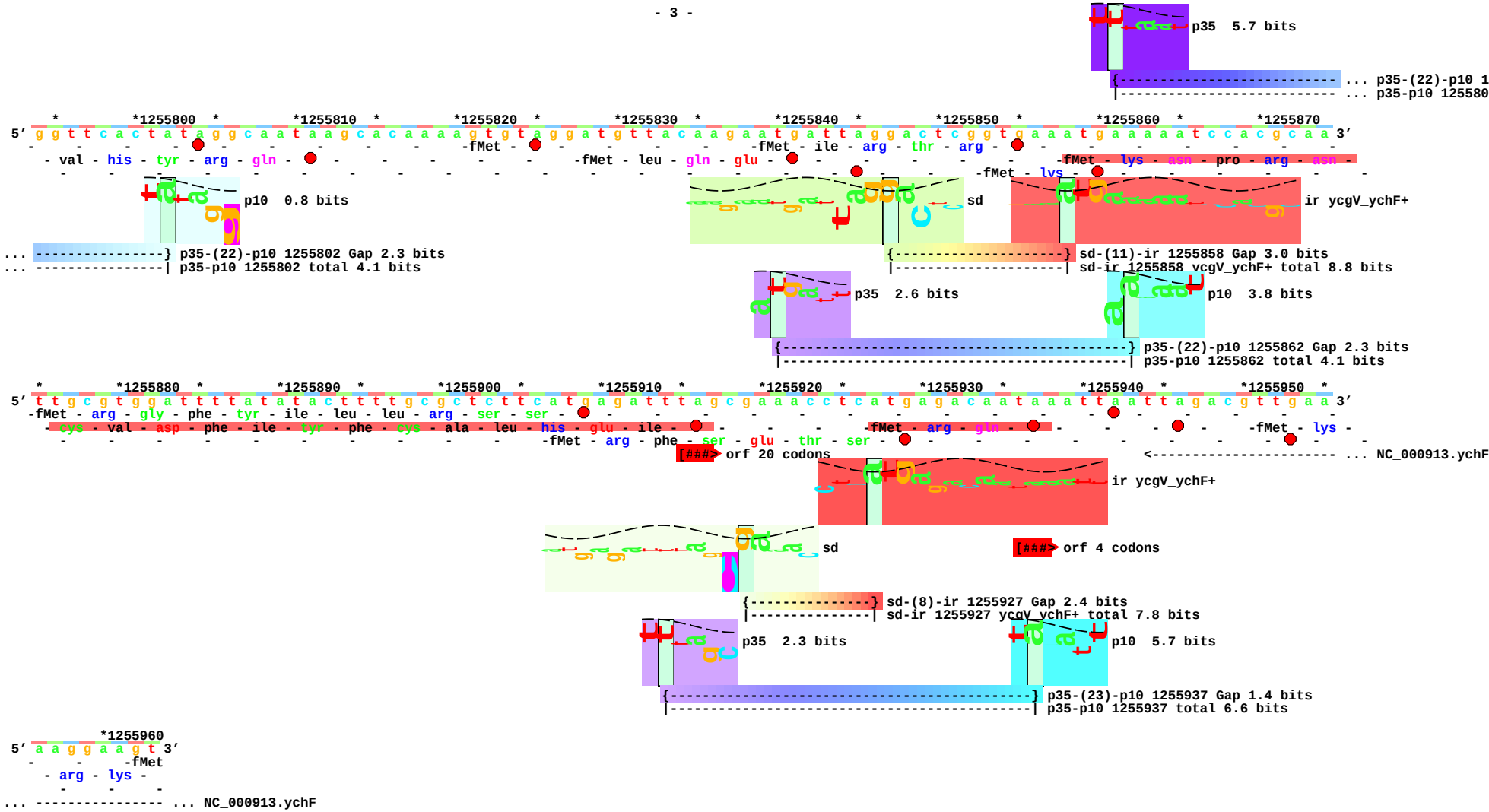

piece 1, NC_000913, ycgV_ychF+, config: linear, direction: +, begin: 1255146, end: 1255963
*1255150 *1255160 *1255170 *1255180 *1255190 *1255200 *1255210 *1255220 *
5′ g g t a t t c c c a t t g t g t t g t t t g a t g c c c a t a c c a c t c c t a t a t a g t a c c a g a c t a t g g g t c t a t g g a t t t t g t c a t t t t g 3′
- gly - ile - pro - ile - val - leu - phe - asp - ala - his - thr - thr - pro - ile - fMet - asp - phe - val - ile - leu -
- val - phe - pro - leu - cys - cys - leu - met - pro - ile - pro - leu - leu - tyr - ser - thr - gln - thr - met - gly - leu - trp - ile - leu - ser - phe - cys -
- tyr - ser - his - cys - val - val -
... ----------] NC_000913.ycgV
p10 5.9 bits
p35 5.5 bits
p35 4.7 bits
p10 1.0 bits
{---------- ... p35-(23)-p10 12552
{----------} p35-(21)-p10 1255187 Gap 3.3 bits
|----------| p35-p10 1255187 total 7.3 bits
{----------} p35-(23)-p10 1255189 Gap 1.4 bits
|----------| p35-p10 1255189 total 4.2 bits
|---------- ... p35-p10 1255240 to
{---------- ... p35-(25)-p10 12552
|---------- ... p35-p10 1255242 to
... p35
{------- ... p35-(22)-p10 12552
|------- ... p35-p10 1255245 to
*1255230 *1255240 *1255250 *1255260 *1255270 *1255280 *1255290 *1255300 *
5′ t t t a a a t c a a t g a a t a a t a t c c t c t t a t c a t c a t g a t a t t t g t a t g g t g c a a t c a t g a t g a g c t t c t c a g a g a a t a a t t c t 3′
- phe - lys - ser - met - asn - asn - ile - leu - leu - ser - ser - fMet - tyr - gly - ala - ile - met - met - ser - phe - ser - glu - asn - asn - ser -
- leu - asn - gln - fMet - val - gln - ser -
- fMet - ile - phe - val - trp - cys - asn - his - asp - glu - leu - leu - arg - glu -
p10 4.6 bits
p10 6.3 bits
ir ycgV_ychF+
... ----------} p35-(23)-p10 1255240 Gap 1.4 bits
sd
ir ycgV_ychF+
... ----------| p35-p10 1255240 total 8.7 bits
p10 3.6 bits
{----------} sd-(8)-ir 1255281 Gap 2.4 bits
... ----------} p35-(25)-p10 1255242 Gap 4.0 bits
|----------| sd-ir 1255281 ycgV_ychF+ total 8.3 bits
... ----------| p35-p10 1255242 total 7.8 bits
{----------} sd-(11)-ir 1255284 Gap 3.0 bits
... p35 2.9 bits
p10 6.3 bits
|----------| sd-ir 1255284 ycgV_ychF+ total 6.4 bits
... ----------} p35-(22)-p10 1255245 Gap 2.3 bits
... ----------| p35-p10 1255245 total 5.8 bits
p35 5.6 bits
p10 5.2 bits
{----------} p35-(25)-p10 1255253 Gap 4.0 bits
|----------| p35-p10 1255253 total 7.9 bits
p35 3.5 bits
{----------} p35-(22)-p10 1255259 Gap 2.3 bits
|----------| p35-p10 1255259 total 4.7 bits
*1255310 *1255320 *1255330 *1255340 *1255350 *1255360 *1255370 *1255380 *
5′ c t a t t a c c g g g c a a a a t c a g g a a c a c a g g a a t t a a t a t a t t t a a c a t c c c c c t t a c a a a g g t g a g t t t a t a t c g a g t t a 3′
- leu - leu - pro - gly - lys - ile - arg - asn - thr - gly - ile - asn - ile - tyr - leu - thr - ser - pro - leu - gln - arg -
- fMet - ser - leu - tyr - arg - val - ile -
[####> orf 31 codons
*1255390 *1255400 *1255410 *1255420 *1255430 *1255440 *1255450 *1255460 *
5′ t t c c c t a a g t t g t c g t t a c t t a t t c c a a t t c g t t a c t a a a a t a t g g c a a a a a t t a c a a c a a a a c a g c g g t t a a a a a a t t 3′
- fMet - ser - leu - leu - ile - pro - ile - arg - tyr - tyr - lys - tyr - gly - lys - asn - ile - thr - thr - asn - ser - gly -


- 2 -
-fMet - ala - lys - ile - leu - gln - gln - thr - ala - val - lys - lys - phe -
- pro -
-fMet -
p35 4.6 bits
p10 5.6 bits
} p35-(24)-p10 1255423 Gap 2.4 bits
| p35-p10 1255423 total 7.8 bits
*1255470
*1255480
*1255490
*1255500
*1255510
*1255520
*1255530
*1255540
*1255550
5' t g g t g a a g a t t t t t t g t a a t a a t c c t a a t t a g t t a t g g g a a t t t c g c t t g a t g t a t c t g c a t a a c a a a a a c a a t a t g c g c c 3'
- gly - glu - asp - phe - leu -
-fMet - gly - ile - ser - leu - asp - val - ser - ala -
- val - lys - ile - phe - cys - asn - asn - pro - asn -
-fMet - met - tyr - leu - his - asn - lys - asn - asn - met - arg - his -
sd
ir ycgV_ychF+
} sd-(12)-ir 1255520 Gap 4.0 bits
p10 3.2 bits
| sd-ir 1255520 ycgV_ychF+ total 6.9 bits
p35 4.7 bits
p10 3.4 bits
} p35-(21)-p10 1255539 Gap 3.3 bits
| p35-p10 1255539 total 4.5 bits
} p35-(23)-p10 1255541 Gap 1.4 bits
| p35-p10 1255541 total 6.7 bits
*1255560
*1255570
*1255580
*1255590
*1255600
*1255610
*1255620
*1255630
5' a t t t t t g c a t t a c t a a t a a g a a a a a g c a a a a a a c a t c g a t a t t c a t t t t t g g t c a a t g g g t t t t c t g g c c t a t c g t t g t t a 3'
-fMet - val - asn - gly - phe - ser - gly - leu - ser - leu - leu -
-fMet - his - tyr -
-fMet - gly - phe - leu - ala - tyr - arg - cys - tyr -
- phe - cys - ile - thr - asn - lys - lys - lys - gln - lys - thr - ser - ile - phe - ile - phe - gly - gln - trp - val - phe - trp - pro - ile - val - val - ile -
p35 6.2 bits
p10 1.8 bits
p35 4.7 bits
} p35-(26)-p10 1255582 Gap 3.7 bits
| p35-p10 1255582 total 4.3 bits
} ... p35-(22)-p10 1
| ... p35-p10 125564
*1255640
*1255650
*1255660
*1255670
*1255680
*1255690
*1255700
*1255710
5' t t g t g c t a c t g g t t a t c a t t t t c a t c t t g c c a g c a t a t t g g a g c g t g a t c a a t t t t g a t c a g c t g t g a a g g g g g c t g a t g t 3'
- leu - cys - tyr - trp - leu - ser - phe - ser - ser - cys - gln - his - ile - gly - ala -
-fMet - ile - ser - cys - glu - gly - gly - gly -
- cys - ala - thr - gly - tyr - his - phe - his - leu - ala - ser - ile - leu - glu - arg - asp - gln - phe -
-fMet - lys - gly - ala - asp - val -
- val - leu - leu - val - ile - ile - phe - ile - leu - pro - ala - tyr - trp - ser - val - ile - asn - phe - asp - gln - leu -
-fMet - cys -
p10 2.3 bits
p10 1.5 bits
[###> orf 60 codons
... } p35-(22)-p10 1255649 Gap 2.3 bits
p10 1.4 bits
... | p35-p10 1255649 total 4.7 bits
p35 6.1 bits
} p35-(23)-p10 1255682 Gap 1.4 bits
| p35-p10 1255682 total 6.2 bits
} p35-(24)-p10 1255683 Gap 2.4 bits
| p35-p10 1255683 total 5.0 bits
*1255720
*1255730
*1255740
*1255750
*1255760
*1255770
*1255780
*1255790
5' g t a g t g a t a c a a a a a c t t a c g t t a t a t c a c t g c t a a t g a g a t a t c c g g c a t c t g a a c a c t t a t g t c t t t a a t t a t t c t c g t 3'
-fMet - ile - gln - lys - leu - thr - leu - tyr - his - cys -
-fMet - ser - leu - ile - ile - leu - val -
- ser - asp - thr - lys - thr - tyr - val - ile - ser - leu - leu - met - arg - tyr - pro - ala - ser - glu - his - leu - cys - leu -


p35 5.7 bits
... p35-(22)-p10 1
... p35-p10 125580
*1255800 *1255810 *1255820 *1255830 *1255840 *1255850 *1255860 *1255870
5′ g g t t c a c t a t a g g c a a t a a g c a c a a a a g t g t a g g a t g t t a c a a g a a t g a t t a g g a c t c g g t g a a a t g a a a a a t c c a c g c a a 3′
- val - his - tyr - arg - gln -
-fMet - leu - gln - glu -
-fMet - ile - arg - thr - arg -
-fMet - lys - asn - pro - arg - asn -
-fMet - lys -
p10 0.8 bits
sd
ir ycgV_ychF+
... p35-(22)-p10 1255802 Gap 2.3 bits
... p35-p10 1255802 total 4.1 bits
sd-(11)-ir 1255858 Gap 3.0 bits
sd-ir 1255858 ycgV_ychF+ total 8.8 bits
p35 2.6 bits
p10 3.8 bits
p35-(22)-p10 1255862 Gap 2.3 bits
p35-p10 1255862 total 4.1 bits
*1255880 *1255890 *1255900 *1255910 *1255920 *1255930 *1255940 *1255950
5′ t t g c g t g g a t t t t a t a t a c t t t t g c g c t c t t c a t g a g a t t t a g c g a a a c c t c a t g a g a c a a t a a a t t a a t t a g a c g t t g a a 3′
-fMet - arg - gly - phe - tyr - ile - leu - leu - arg - ser - ser -
- cys - val - asp - phe - ile - tyr - phe - cys - ala - leu - his - glu - ile -
-fMet - arg - gln -
-fMet - lys -
-fMet - arg - phe - ser - glu - thr - ser -
[###> orf 20 codons
<---------- ... NC_000913.ychF
ir ycgV_ychF+
sd
[###> orf 4 codons
sd-(8)-ir 1255927 Gap 2.4 bits
sd-ir 1255927 ycgV_ychF+ total 7.8 bits
p35 2.3 bits
p10 5.7 bits
p35-(23)-p10 1255937 Gap 1.4 bits
p35-p10 1255937 total 6.6 bits
*1255960
5′ a a g g a a g t 3′
-fMet
- arg - lys -
... NC_000913.ychF