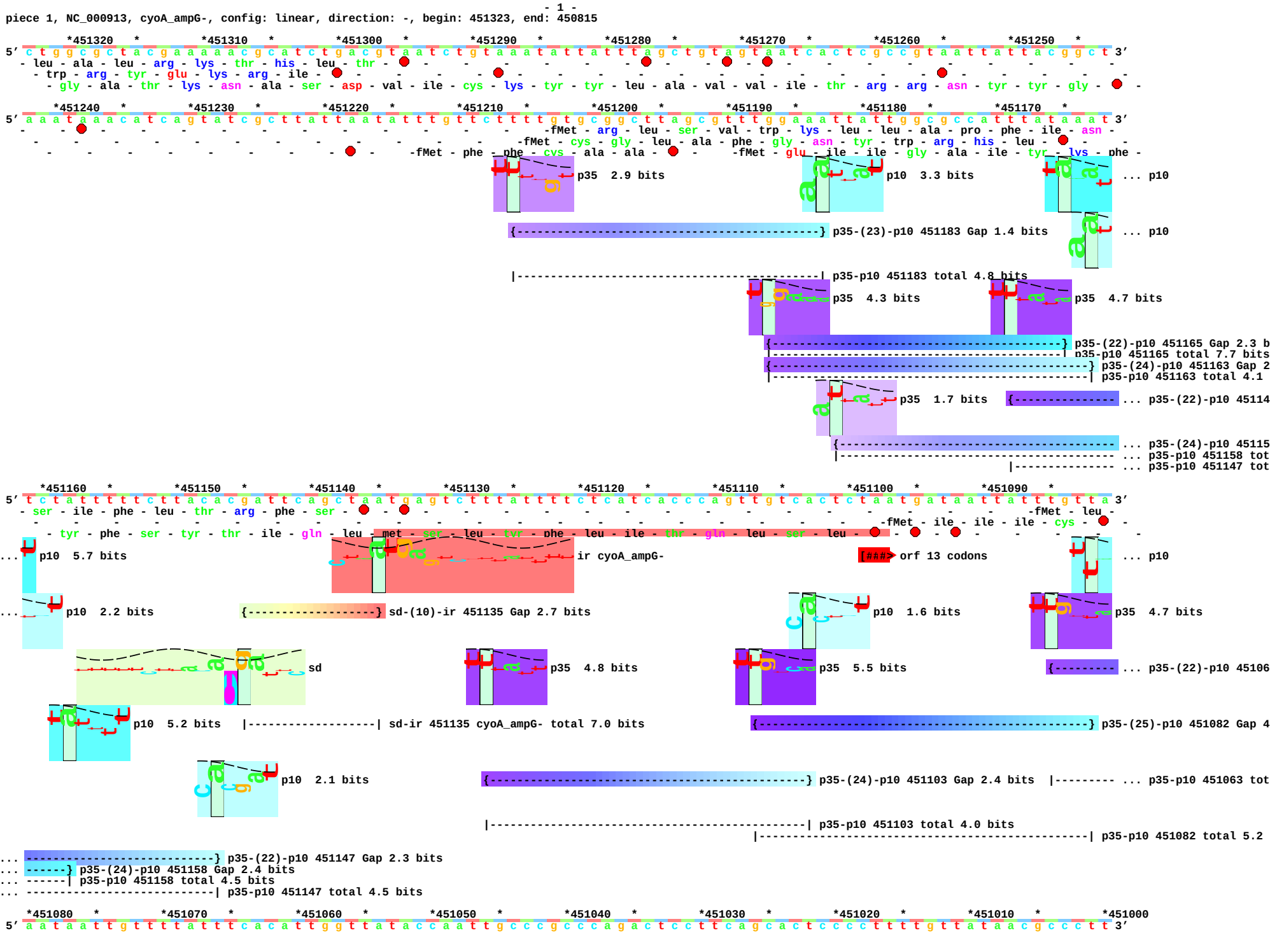
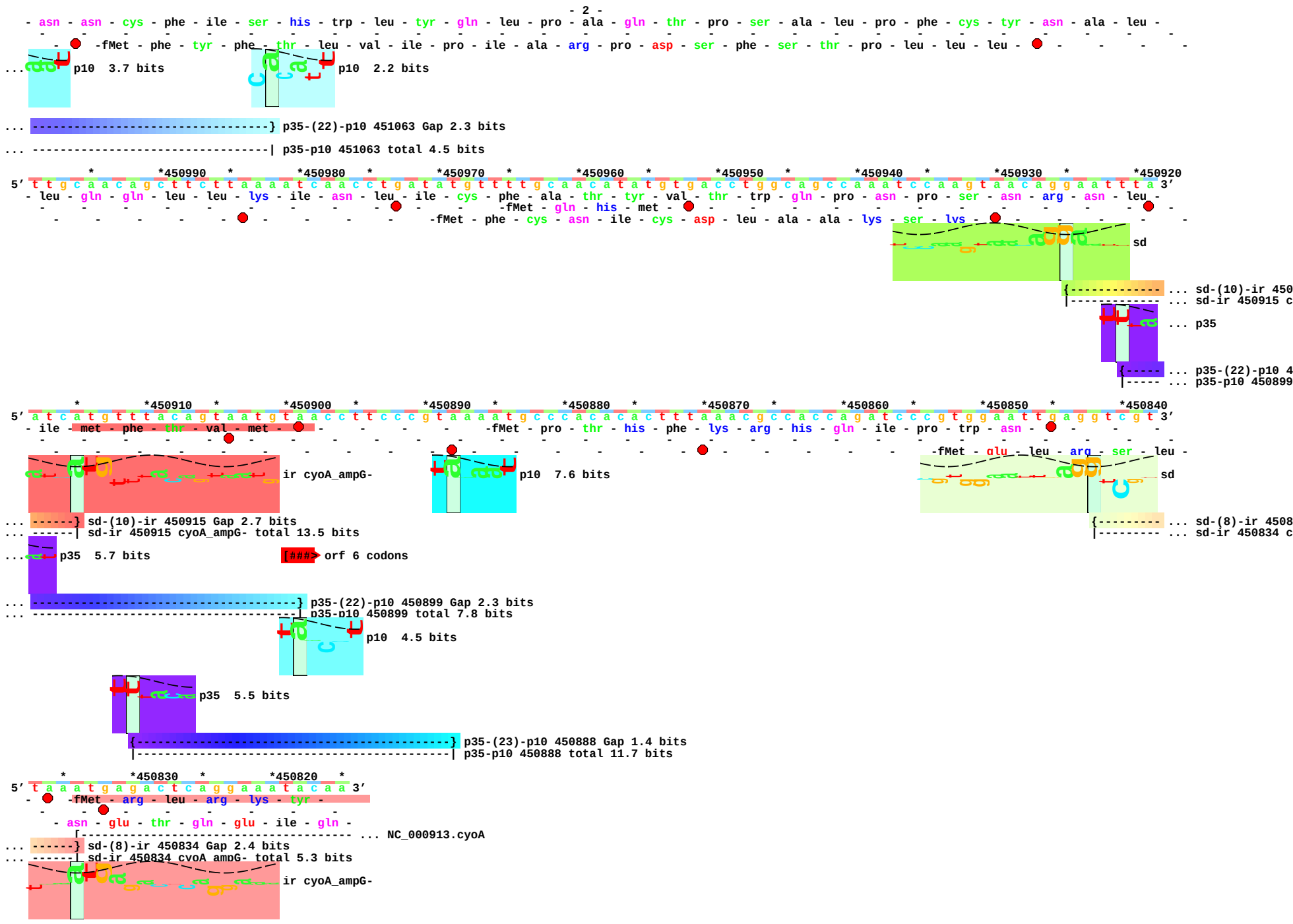

- 1 -
piece 1, NC_000913, cyoA_ampG-, config: linear, direction: -, begin: 451323, end: 450815
*451320 * *451310 * *451300 * *451290 * *451280 * *451270 * *451260 * *451250 *
5' c t g c g c t a c g a a a a c g c a t c t g a c g t a a t c t g t a a a t a t t a t t t a g c t g t a g t a a t c a c t c g c c g t a a t t a t t a c g g c t 3'
- leu - ala - leu - arg - lys - thr - his - leu - thr -
- trp - arg - tyr - glu - lys - arg - ile -
- gly - ala - thr - lys - asn - ala - ser - asp - val - ile - cys - lys - tyr - tyr - leu - ala - val - val - ile - thr - arg - arg - asn - tyr - tyr - gly -
*451240 * *451230 * *451220 * *451210 * *451200 * *451190 * *451180 * *451170 *
5' a a a t a a a a c a t c a g t a t c g c t t a t t a a t a t t t g t t c t t t t g t g c g g c t t a g c g t t t g g a a a t t a t t g g c g c c a t t t a t a a a t 3'
-fMet - arg - leu - ser - val - trp - lys - leu - leu - ala - pro - phe - ile - asn -
-fMet - cys - gly - leu - ala - phe - gly - asn - tyr - trp - arg - his - leu -
-fMet - phe - phe - cys - ala - ala -
-fMet - glu - ile - ile - gly - ala - ile - tyr - lys - phe -
p35 2.9 bits
p10 3.3 bits
... p10
{----------} p35-(23)-p10 451183 Gap 1.4 bits
... p10
|----------| p35-p10 451183 total 4.8 bits
p35 4.3 bits
p35 4.7 bits
{----------} p35-(22)-p10 451165 Gap 2.3 b
|----------| p35-p10 451165 total 7.7 bits
{----------} p35-(24)-p10 451163 Gap 2
|----------| p35-p10 451163 total 4.1
p35 1.7 bits
{---------- ... p35-(22)-p10 45114
{---------- ... p35-(24)-p10 45115
|---------- ... p35-p10 451158 tot
|---------- ... p35-p10 451147 tot
*451160 * *451150 * *451140 * *451130 * *451120 * *451110 * *451100 * *451090 *
5' t c t a t t t t t c t t a c a c g a t t c a g c t a a t g a g t c t t t a t t t t c t c a c c c a g t t g t c a c t c t a a t g a t a a t t a t t g t t a 3'
- ser - ile - phe - leu - thr - arg - phe - ser -
-fMet - leu -
-fMet - ile - ile - ile - cys -
- tyr - phe - ser - tyr - thr - ile - gln - leu - met - ser - leu - tyr - phe - leu - ile - thr - gln - leu - ser - leu -
... p10 5.7 bits
ir cyoA_ampG-
[###> orf 13 codons
... p10
... p10 2.2 bits
{----------} sd-(10)-ir 451135 Gap 2.7 bits
p10 1.6 bits
p35 4.7 bits
sd
p35 4.8 bits
p35 5.5 bits
{--------- ... p35-(22)-p10 45106
p10 5.2 bits |----------| sd-ir 451135 cyoA_ampG- total 7.0 bits
{----------} p35-(25)-p10 451082 Gap 4
p10 2.1 bits
{----------} p35-(24)-p10 451103 Gap 2.4 bits |--------- ... p35-p10 451063 tot
|----------| p35-p10 451103 total 4.0 bits
|----------| p35-p10 451082 total 5.2
... {----------} p35-(22)-p10 451147 Gap 2.3 bits
... {------} p35-(24)-p10 451158 Gap 2.4 bits
... |------| p35-p10 451158 total 4.5 bits
... |----------| p35-p10 451147 total 4.5 bits
*451080 * *451070 * *451060 * *451050 * *451040 * *451030 * *451020 * *451010 * *451000
5' a a t a a t t g t t t t a t t t c a c a t t g g t t a t a c c a a t t g c c c g c c c a g a c t c c t t c a g c a c t c c c c t t t t g t t a t a a c g c c c t t 3'


- 2 -
p10 3.7 bits
p10 2.2 bits
p35-(22)-p10 451063 Gap 2.3 bits
p35-p10 451063 total 4.5 bits
sd
p35
p35-(22)-p10 4
p35-p10 450899
ir cyoA_ampG-
p10 7.6 bits
sd
sd-(10)-ir 450915 Gap 2.7 bits
sd-ir 450915 cyoA_ampG- total 13.5 bits
sd-(8)-ir 4508
sd-ir 450834 c
p35 5.7 bits
orf 6 codons
p35-(22)-p10 450899 Gap 2.3 bits
p35-p10 450899 total 7.8 bits
p10 4.5 bits
p35 5.5 bits
p35-(23)-p10 450888 Gap 1.4 bits
p35-p10 450888 total 11.7 bits
NC_000913.cyoA
sd-(8)-ir 450834 Gap 2.4 bits
sd-ir 450834 cyoA_ampG- total 5.3 bits
ir cyoA_ampG-