- 1 -

piece 1, NC_000913, sfmA_sfmC+, config: linear, direction: +, begin: 557948, end: 558216
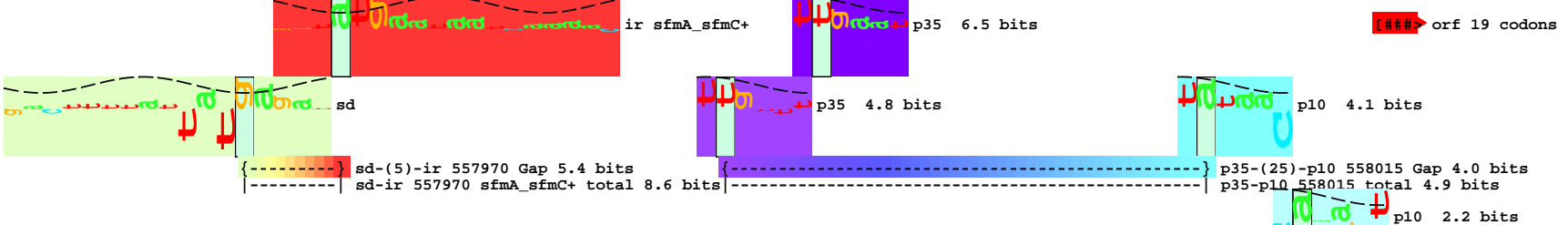
```
      *557950    *      *557960    *      *557970    *      *557980    *      *557990    *      *558000    *      *558010    *      *558020    *
5' gacgcgactttattatgagatatgaataatcaaaccacgttgttttgaattatatatcacgtcttataacaaagtaatg 3'
   - asp - ala - thr - phe - ile - met - arg - tyr - glu -                            -fMet -
   - thr - arg - leu - leu - leu -         arg -         -fMet - asn - asn - gln - asn - his - val - val - leu - asn - tyr - ile - ser - arg - leu - ile - thr - lys -
   - arg - asp - phe - tyr - tyr - glu - ile -          -fMet - phe -
```
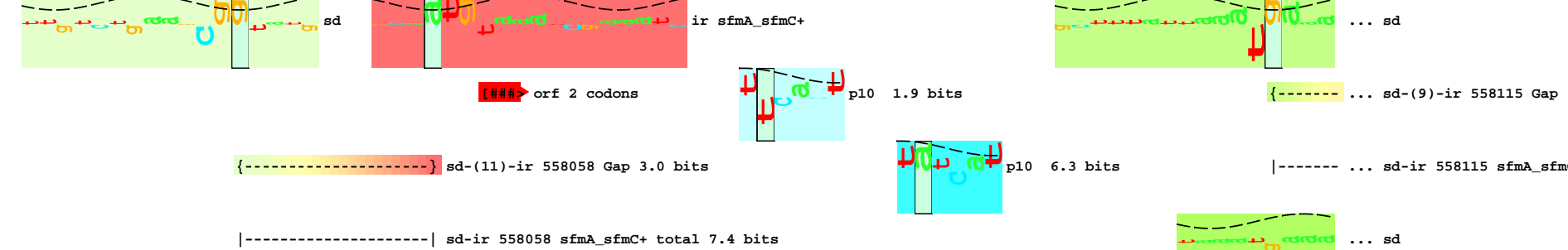
ir sfmA_sfmC+
p35 6.5 bits
[###> orf 19 codons

sd
p35 4.8 bits
p10 4.1 bits

{-------} sd-(5)-ir 557970 Gap 5.4 bits
|---------| sd-ir 557970 sfmA_sfmC+ total 8.6 bits
{---------------------------} p35-(25)-p10 558015 Gap 4.0 bits
|---------------------------| p35-p10 558015 total 4.9 bits

p10 2.2 bits
{---------------------------} p35-(25)-p10 558020 Gap 4.0 bits
|---------------------------| p35-p10 558020 total 4.8 bits

```
      *558030    *      *558040    *      *558050    *      *558060    *      *558070    *      *558080    *      *558090    *      *558100    *
5' taccggttgtctgaagcggtatggtggcaatgtaaatcgaaatcatgttcactttgtatcatgccgctttattaaatgaaa 3'
   - tyr - arg - leu - ser - glu - ala - val - trp - trp - gln - cys - lys - ser - lys - ser - cys - ser - leu - cys - ile - met - pro - leu - tyr -        -fMet - lys -
   -                       -fMet - val - ala - met -                -fMet - phe - thr - leu - tyr - his - ala - ala - leu - leu - asn - glu - lys -
```

sd
ir sfmA_sfmC+
... sd
[###> orf 2 codons
p10 1.9 bits
{--------- ... sd-(9)-ir 558115 Gap

{---------------------} sd-(11)-ir 558058 Gap 3.0 bits
p10 6.3 bits
|------- ... sd-ir 558115 sfmA_sfmC+ t

|---------------------| sd-ir 558058 sfmA_sfmC+ total 7.4 bits
... sd

p35 4.0 bits
{------------------------} p35-(23)-p10 558077 Gap 1.4 bits
|------------------------| p35-p10 558077 total 4.5 bits

p35 3.4 bits
{--------------------------} p35-(26)-p10 558086 Gap 3.7 bits
|--------------------------| p35-p10 558086 total 6.1 bits

```
      *558110    *      *558120    *      *558130    *      *558140    *      *558150    *      *558160    *      *558170    *      *558180    *      *558190
5' aggaatgatgtgttgtaagaaaccaaagcaatcatttcttctatattccttattttgtcgtcaggaatacacaagacgcta 3'
   - arg - glu -                            -fMet - leu -
   -         gly - met - met - cys - cys - lys - lys - pro - lys - gln - ser - phe - leu - tyr - ile - pro - tyr - phe - cys - arg - gln - glu - tyr - thr - arg - arg - ile -
                                                                                         -fMet - pro - ser - gly - ile - his - lys - ala - tyr -
```

... sd
ir sfmA_sfmC+
sd

... {---------} sd-(9)-ir 558115 Gap 2.3 bits
p35 5.2 bits
{--------- ... sd-(11)-ir 558197 Gap

... ---------| sd-ir 558115 sfmA_sfmC+ total 6.1 bits
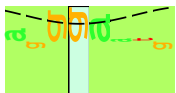
... sd   [###> orf 3 codons

ir sfmA_sfmC+

{--------} sd-(5)-ir 558118 Gap 5.4 bits
|--------| sd-ir 558118_sfmA sfmC+ total 7.3 bits

ir sfmA_sfmC+

{---------} sd-(7)-ir 558120 Gap 3.7 bits
|-------------| sd-ir 558120_sfmA_sfmC+ total 5.6 bits

ir sfmA_sfmC+

{------------------} sd-(10)-ir 558123 Gap 2.7 bits
|------------------| sd-ir 558123 sfmA_sfmC+ total 6.6 bits

```
          *        *558200   *        *558210    *
5' t t a a c t a t g a t g a c t a a a a t a a a g t t 3'
        -      -fMet - met - ile - lys - ile - lys -
      -    ●   -    ●     -     ●   -       -   ●    -      -
      -    asn - tyr - asp - asp - ●     -     -     -     -
      -    -   -[----------------------------------- ... NC_000913.sfmC
```
... ----------} sd-(11)-ir 558197 Gap 3.0 bits
... ------------| sd-ir 558197 sfmA_sfmC+ total 12.6 bits
... ----------------} sd-(14)-ir 558200 Gap 4.9 bits
... ----------------| sd-ir 558200 sfmA_sfmC+ total 12.3 bits
... --} p35-(26)-p10 558192 Gap 3.7 bits
... --| p35-p10 558192 total 4.1 bits
... ----------} p35-(23)-p10 558197 Gap 1.4 bits
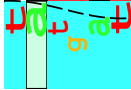... ----------| p35-p10 558197 total 6.3 bits
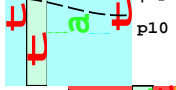
p10 2.6 bits   [###> orf 31 codons

ir sfmA_sfmC+

ir sfmA_sfmC+

p10 6.4 bits

p35 1.3 bits |--------- ... sd-ir 558197 sfmA_sfmC+ t

{---------|--------- ... sd-(14)-ir 558200 Gap

|--------- ... sd-ir 558200 sfmA_sfmC+ t

{--- ... p35-(26)-p10 558192 Gap
-- ... p35-p10 558192 total 4.1

{--- ... p35-(23)-p10 558197 Gap

|--- ... p35-p10 558197 total 6.3