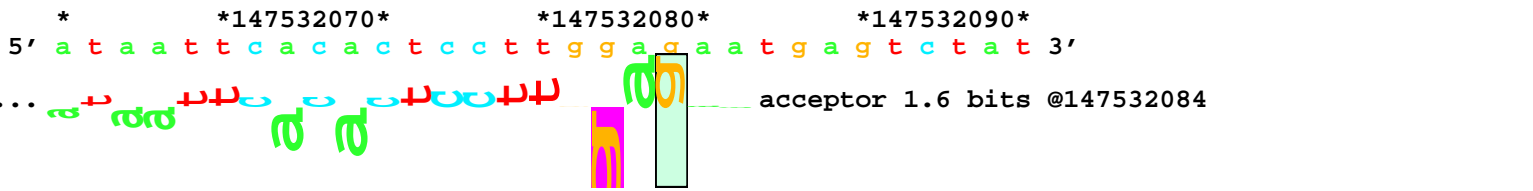
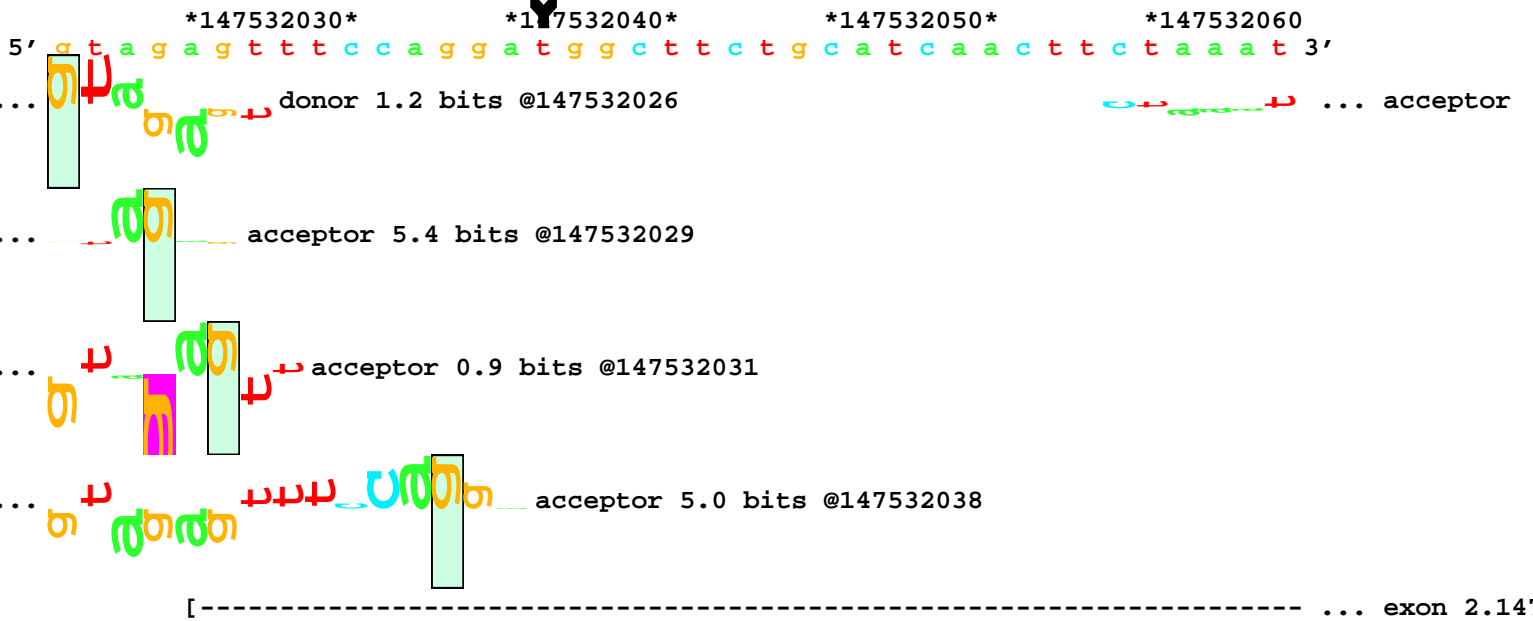
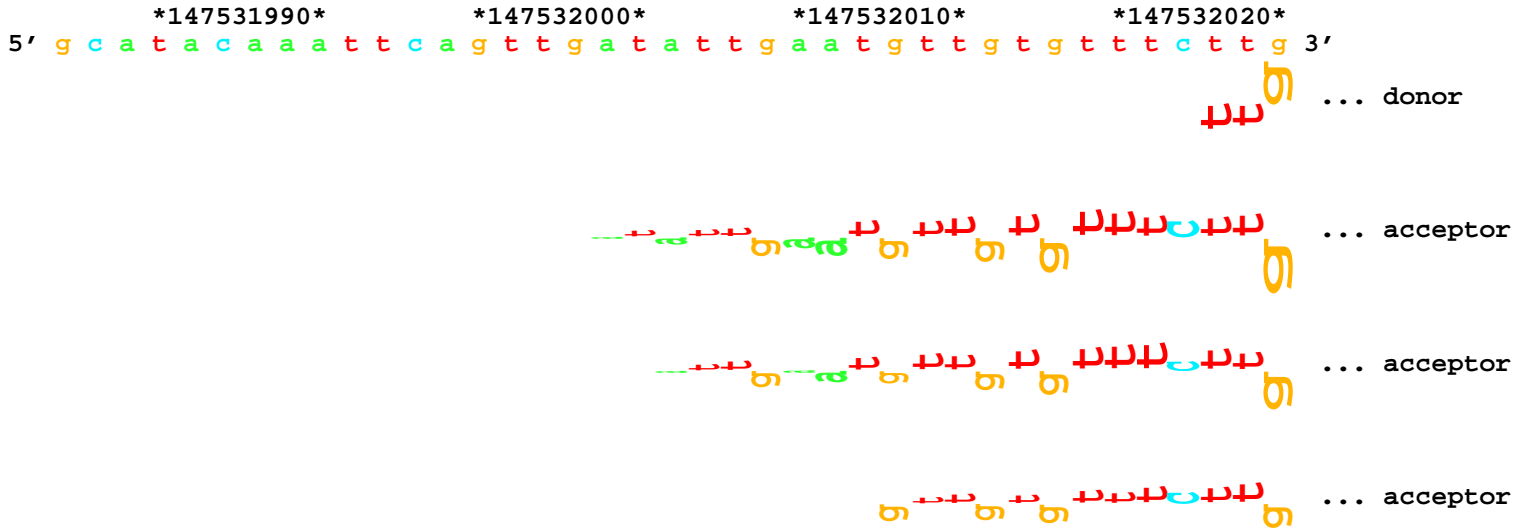


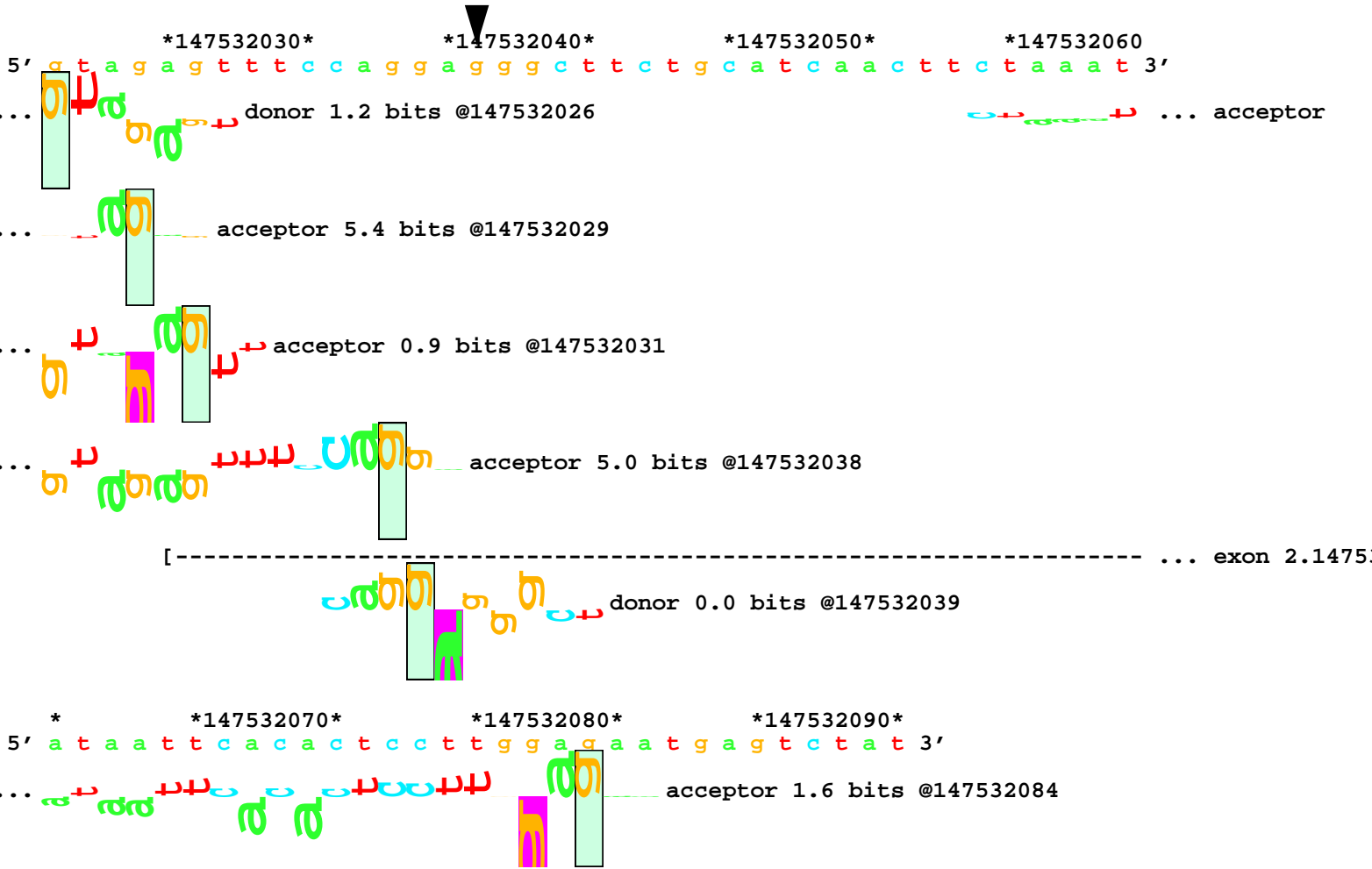
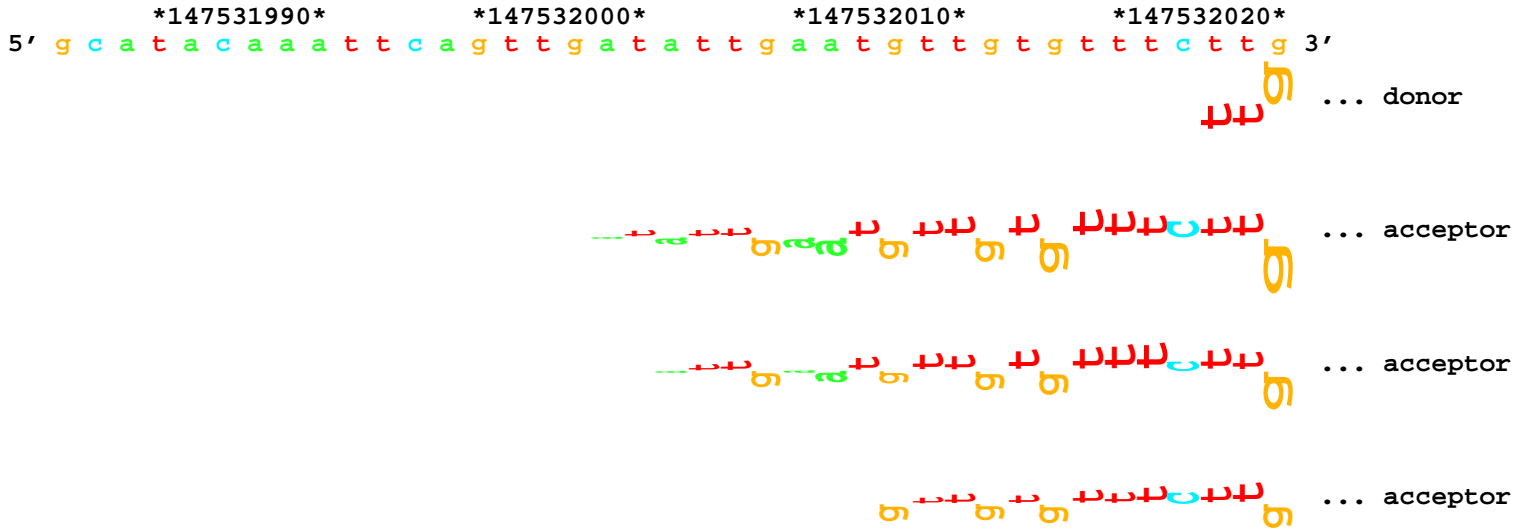
piece 1, MTM1_MTM1.txt , piece 1, config: linear, direction: +, begin: 147531987, end: 147532095



----- ... exon 2.147532030-147532102

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 2, MTM1, c.2T>G t147532041g, config: linear, direction: +, begin: 147531987, end: 147532095



... ----- ... exon 2.147532030-147532102

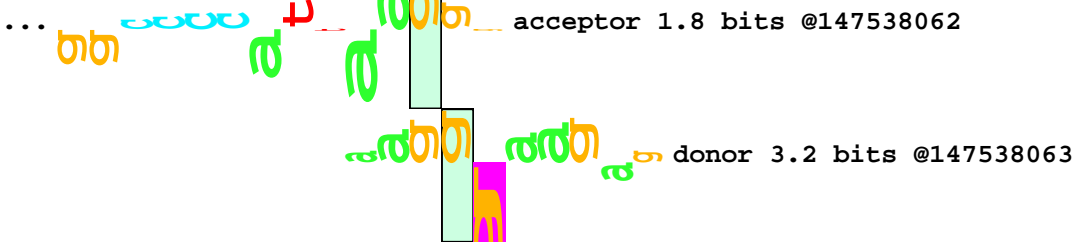
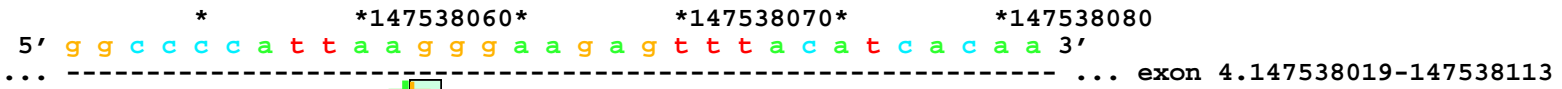
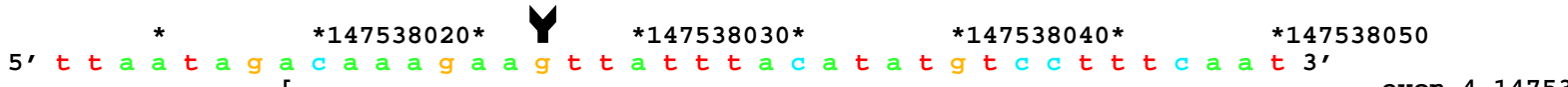
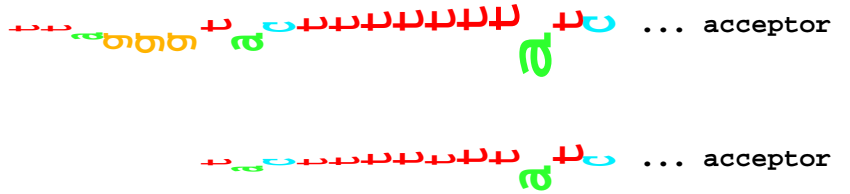
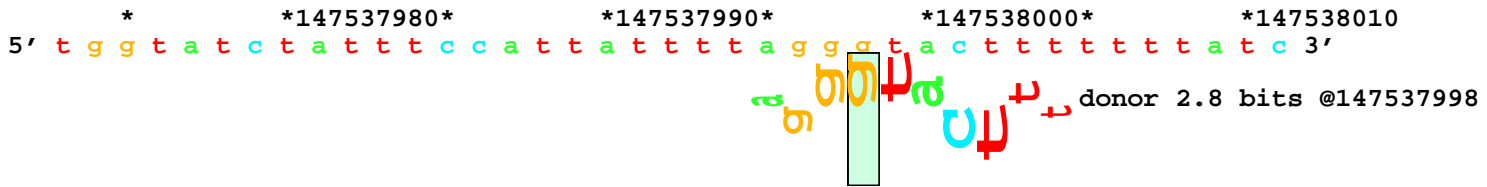
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

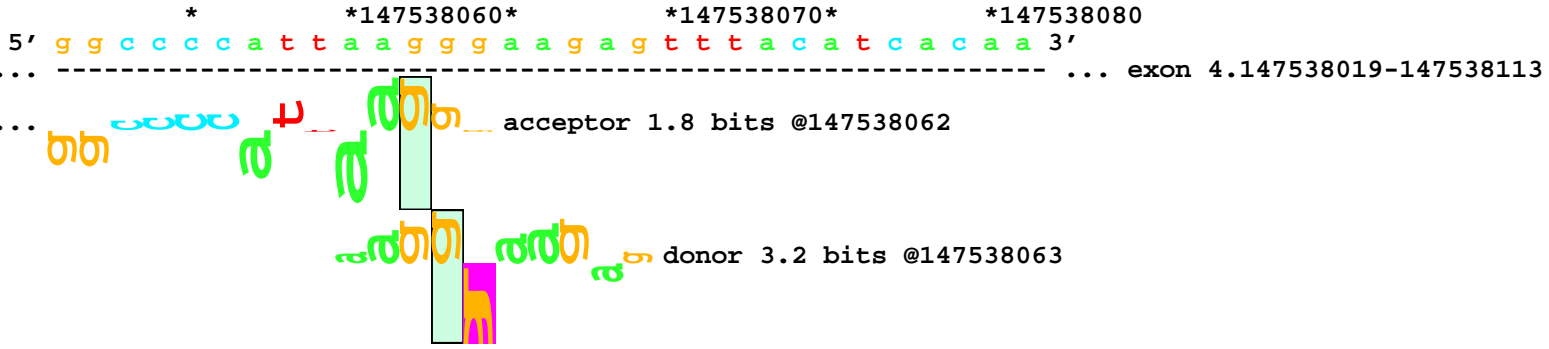
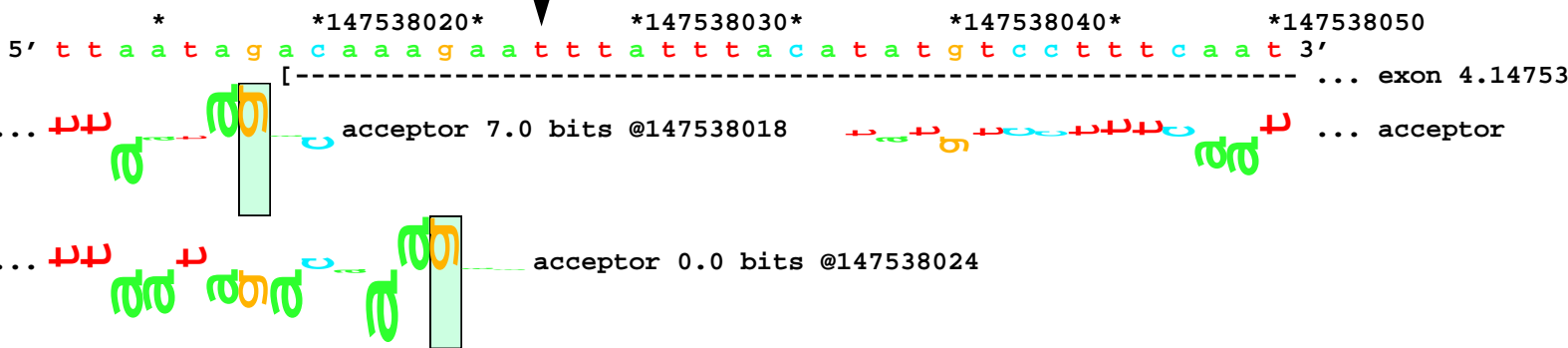
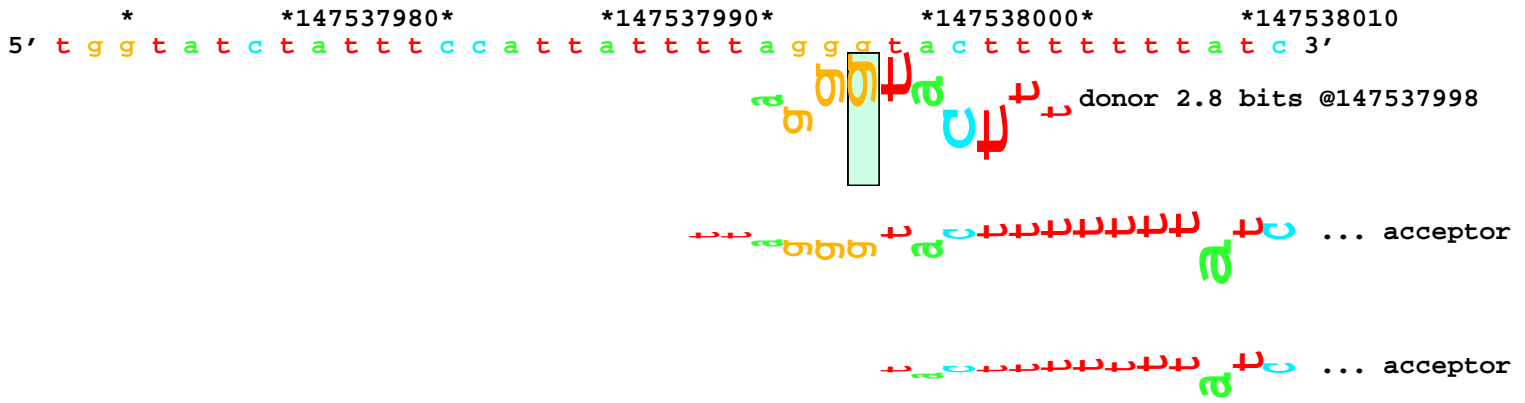
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 3, MTM1_MTM1.txt , piece 1, config: linear, direction: +, begin: 147537973, end: 147538081



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 4, MTM1, c.145G>T g147538027t, config: linear, direction: +, begin: 147537973, end: 14753808



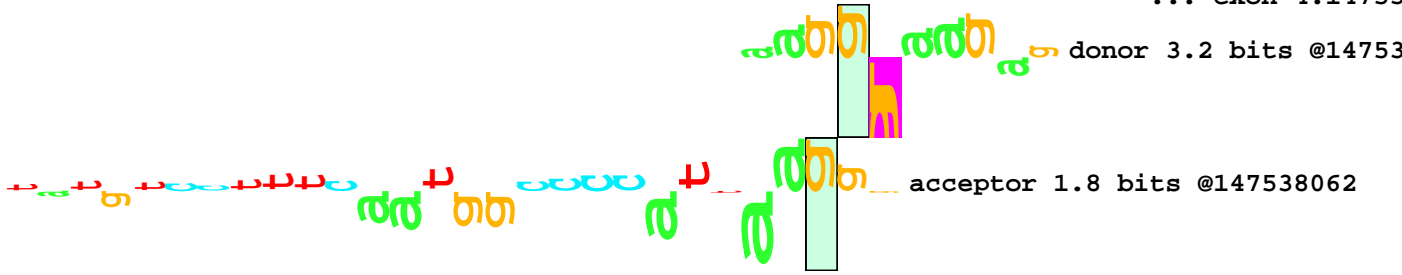
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 5, MTM1_MTM1.txt , piece 1, config: linear, direction: +, begin: 147538033, end: 147538141

* 147538040* 147538050* 147538060* 147538070

5' t a c a t a t g t c c t t t c a a t g g c c c c a t t a a g g g a a g a g t t 3'

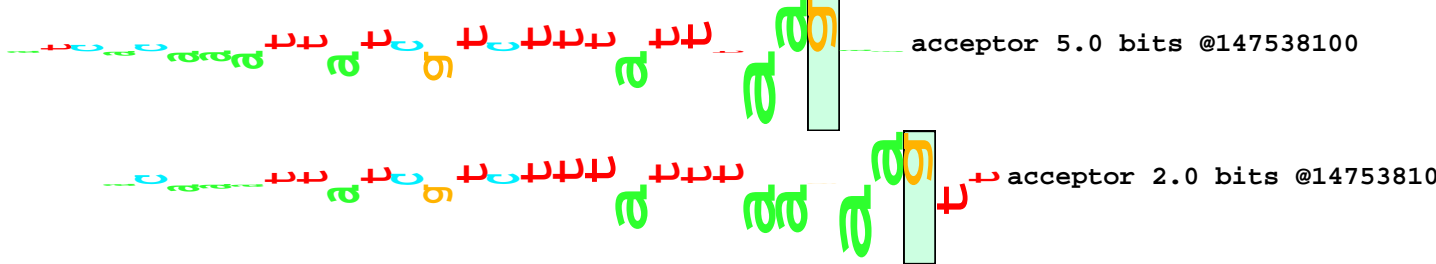
... ----- ... exon 4.14753



* 147538080* 147538090* 147538100* 147538110

5' t a c a t c a c a a a t t a t c g t c t t t a t t t a a g a a g t t t g g a a 3'

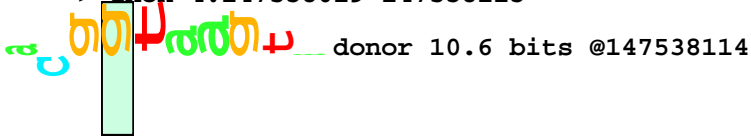
... ----- ... exon 4.14753



* 147538120* 147538130* 147538140

5' a c g g t a a g t a g a a t a t a a g a c c a t a a a g a t g 3'

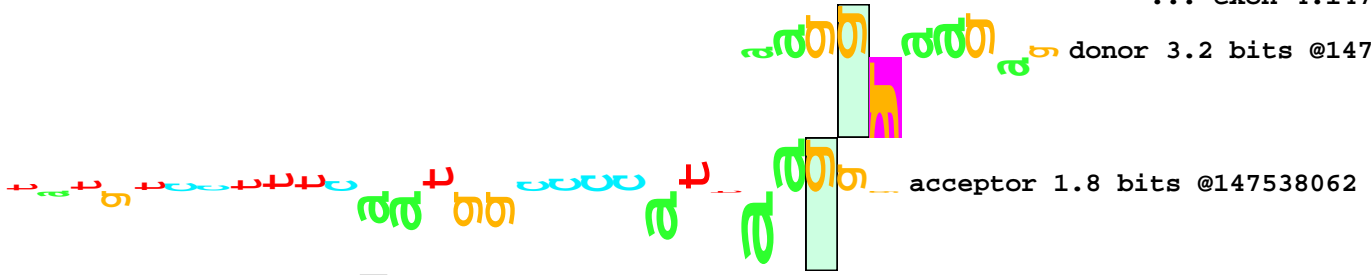
... -----> exon 4.147538019-147538113



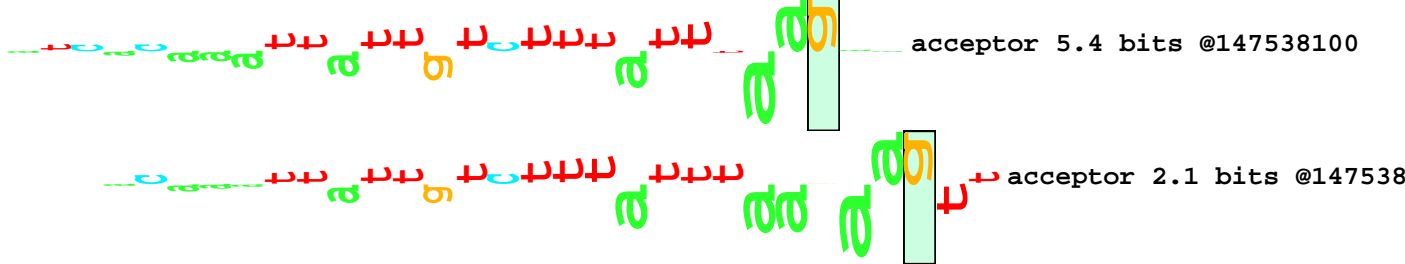
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 6, MTM1, c.205C>T c147538087t, config: linear, direction: +, begin: 147538033, end: 14753814

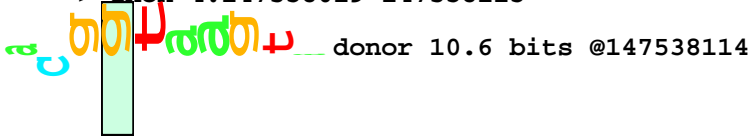
* 147538040* *147538050* *147538060* *147538070
5' t a c a t a t g t c c t t t c a a t g g c c c c a t t a a g g g a a g a g t t 3'
... ----- ... exon 4.14753



* 147538080* *147538090* *147538100* *147538110
5' t a c a t c a c a a a t t a t t g t c t t t a t t t a a g a a g t t t g g a a 3'
... ----- ... exon 4.14753

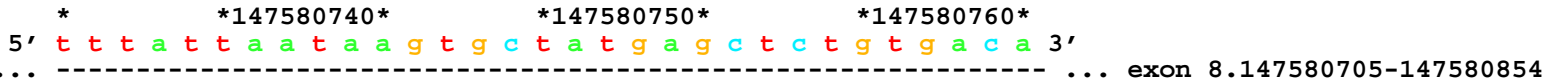
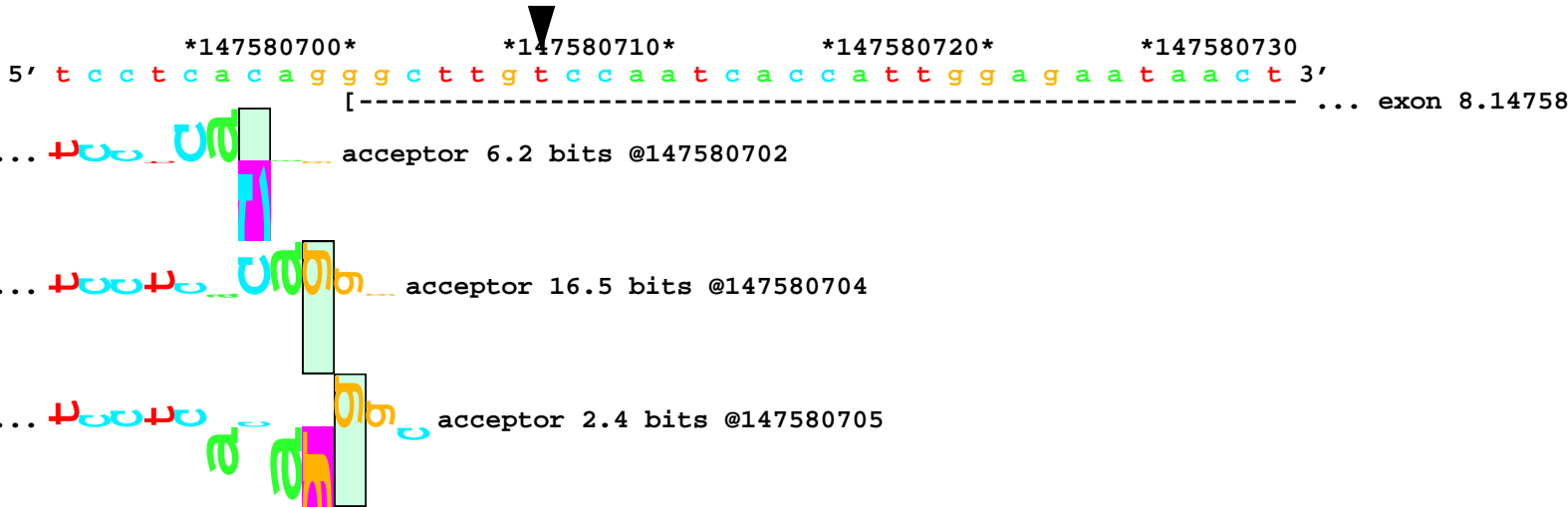
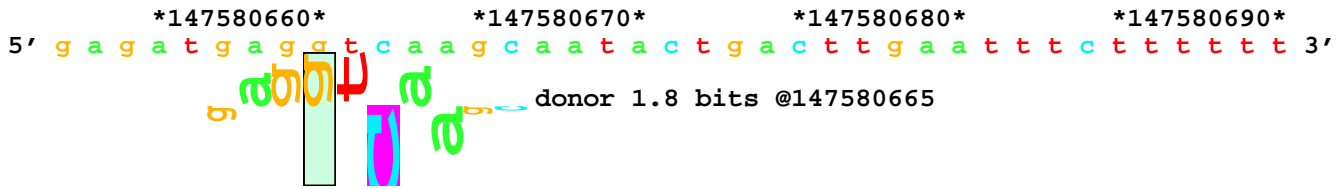


* 147538120* *147538130* *147538140
5' a c g g t a a g t a g a a t a t a a g a c c a t a a a g a t g 3'
... ----> exon 4.147538019-147538113



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 8, MTM1, c.535C>T c147580711t, config: linear, direction: +, begin: 147580657, end: 14758076



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

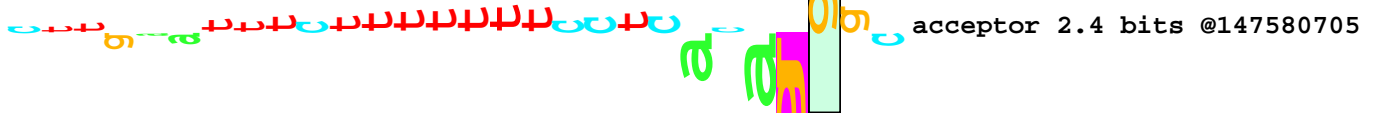
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

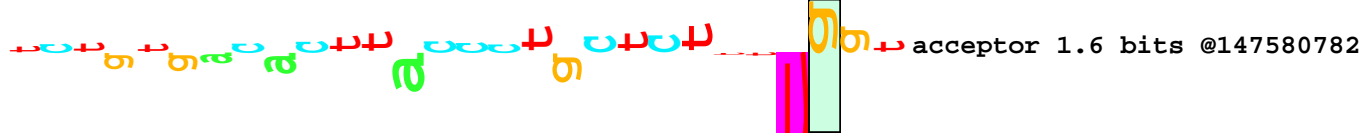
piece 9, MTM1_MTM1.txt , piece 1, config: linear, direction: +, begin: 147580679, end: 147580787

147580680 *147580690* *147580700* *147580710*
 5' a c t t g a a t t t c t t t t t t t c c t c a c a g g g c t t g c c c a a t c 3'



147580720 *147580730* *147580740* *147580750*
 5' a c c a t t g g a g a a t a a c t t t t a t t a a t a a g t g c t a t g a g c 3'

147580760 *147580770* *147580780*
 5' t c t g t g a c a c t t a c c c t g c t c t t t t g g t g g t 3'



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 10, l_10, c.557C>T c147580733t, config: linear, direction: +, begin: 147580679, end: 1475807

147580680 *147580690* *147580700* *147580710*
 5' a c t t g a a t t t c t t t t t t t c c t c a c a g g g c t t g c c c a a t c 3'



147580720 *147580730* *147580740* *147580750*
 5' a c c a t t g g a g a a t a a t t t t t t a t t a a t a a g t g c t a t g a g c 3'

147580760 *147580770* *147580780*
 5' t c t g t g a c a c t t a c c c t g c t c t t t t g g t g g t 3'



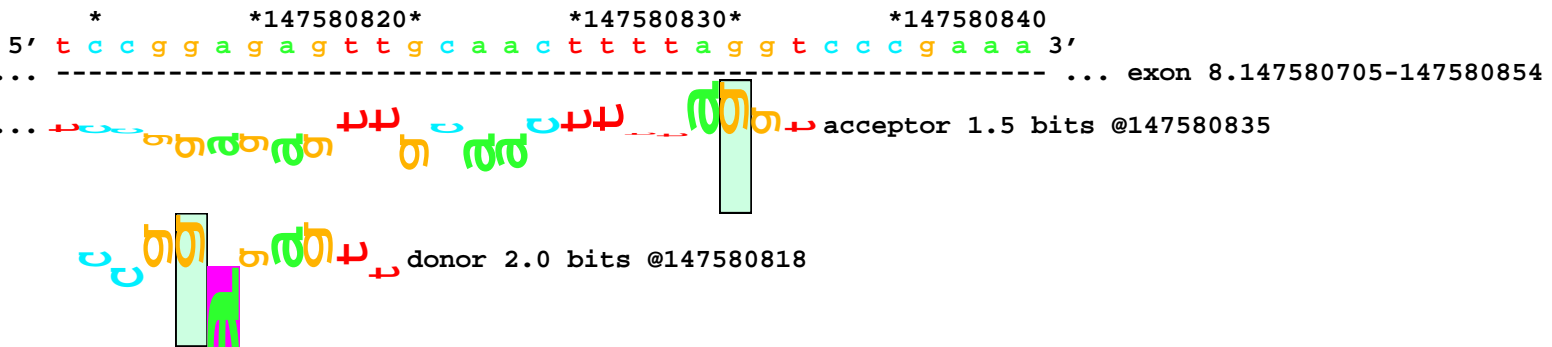
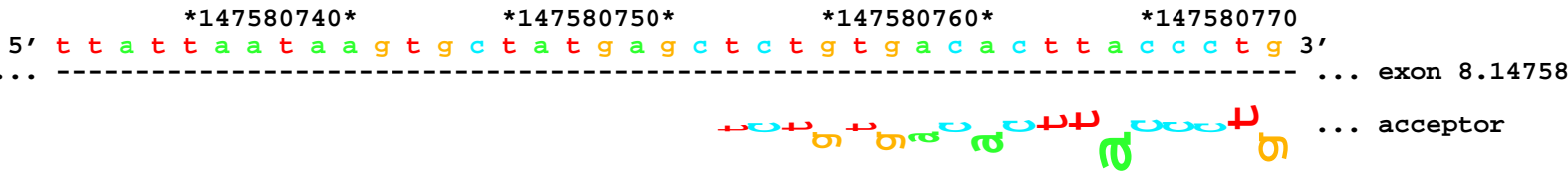
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 11, 1_11, piece 1, config: linear, direction: +, begin: 147580736, end: 147580844



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

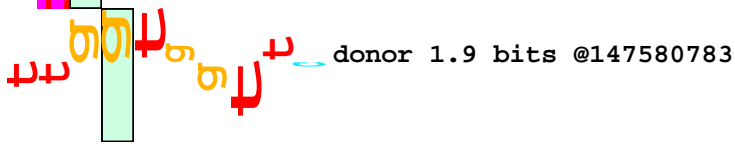
piece 12, 1_12, c.614C>T c147580790t, config: linear, direction: +, begin: 147580736, end: 1475808

5' ***147580740*** ***147580750*** ***147580760*** ***147580770***
t t a t t a a t a a g t g c t a t g a g c t c t g t g a c a c t t a c c c t g 3'



5' * ***147580780*** ***147580790*** ***147580800*** ***147580810***
c t c t t t t g g t g g t t c t g t a t c g t g c c t c a g a t g a t g a c c 3'

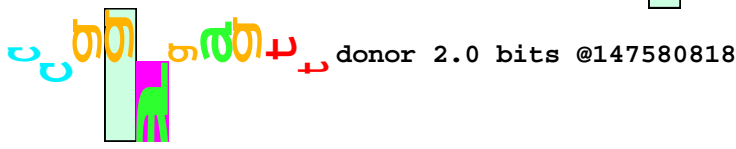
... acceptor 1.6 bits @147580782 ... acceptor



... acceptor 6.2 bits @147580804

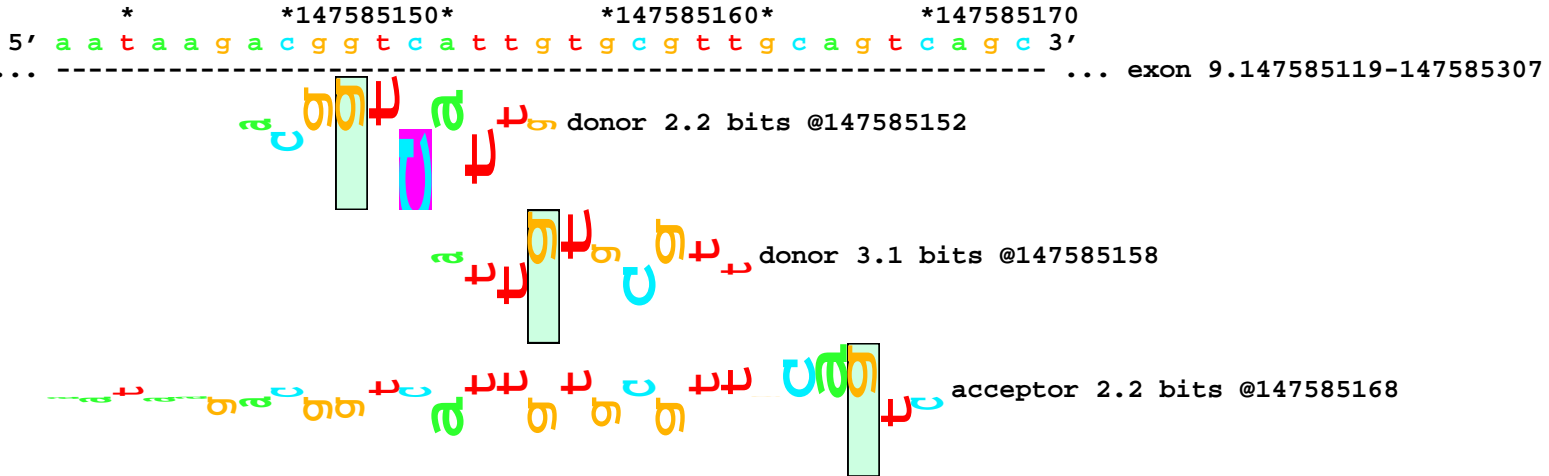
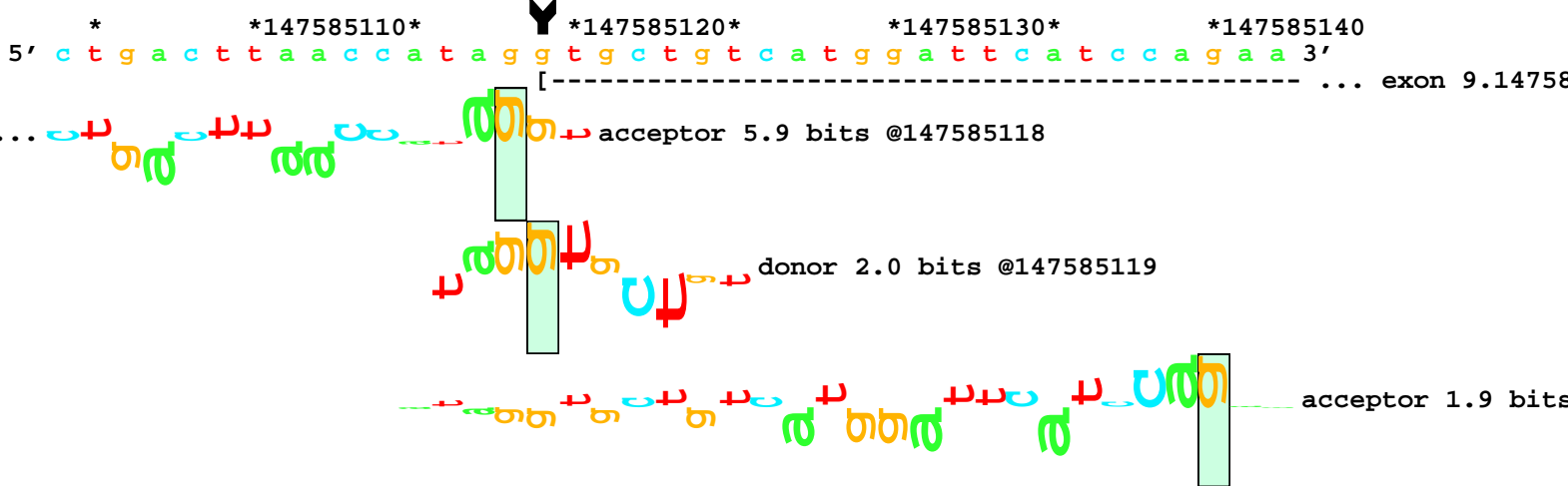
5' * ***147580820*** ***147580830*** ***147580840***
t c c g g a g a g t t g c a a c t t t t a g g t c c c g a a a 3'

... acceptor 1.5 bits @147580835



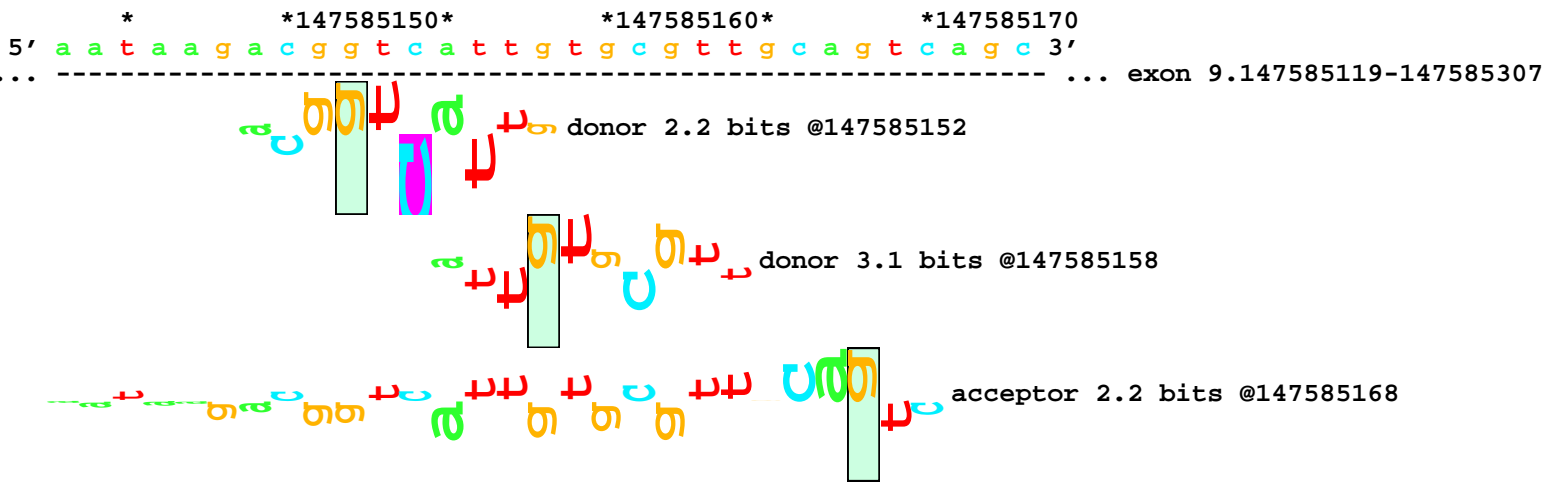
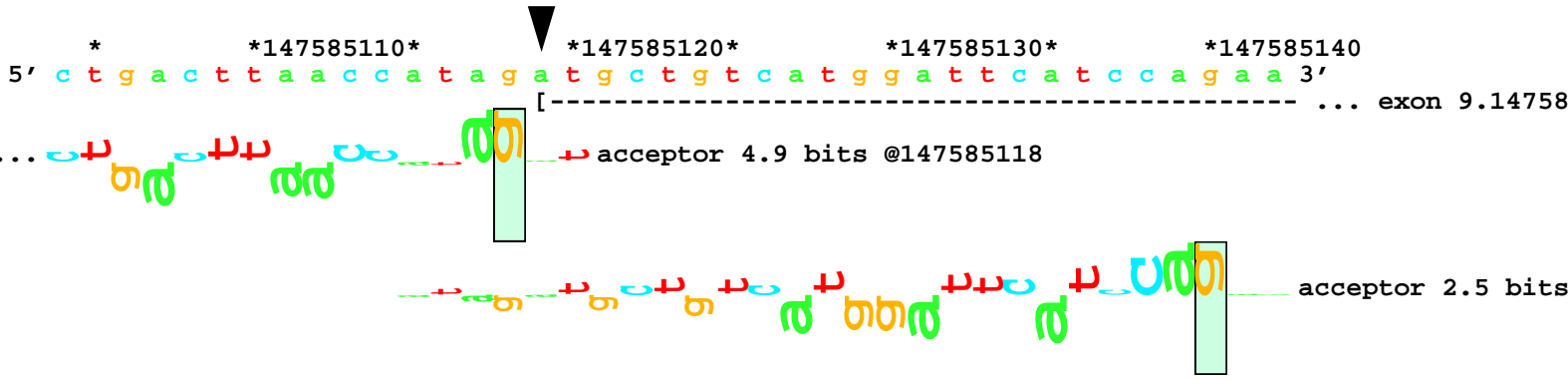
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 13, 1_13, piece 1, config: linear, direction: +, begin: 147585065, end: 147585173



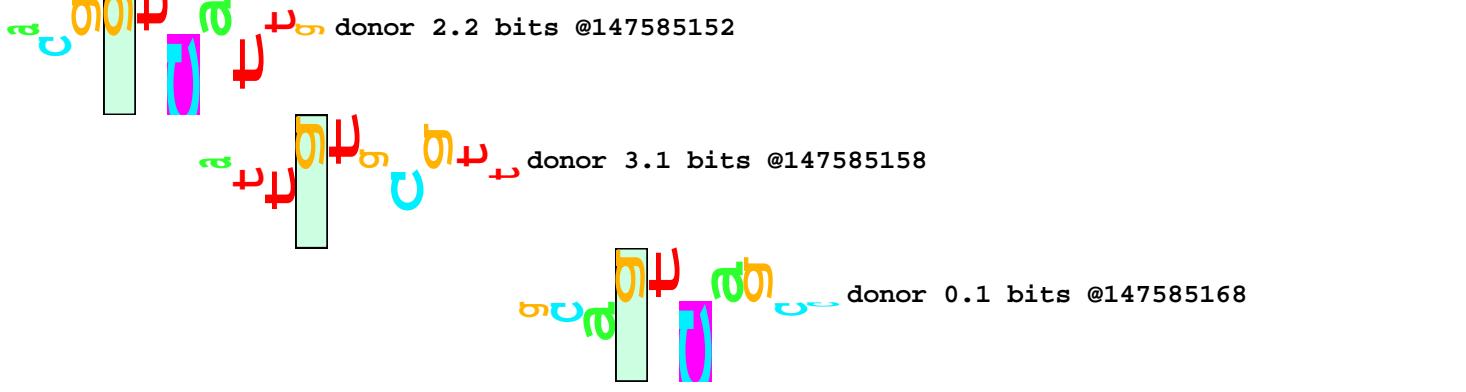
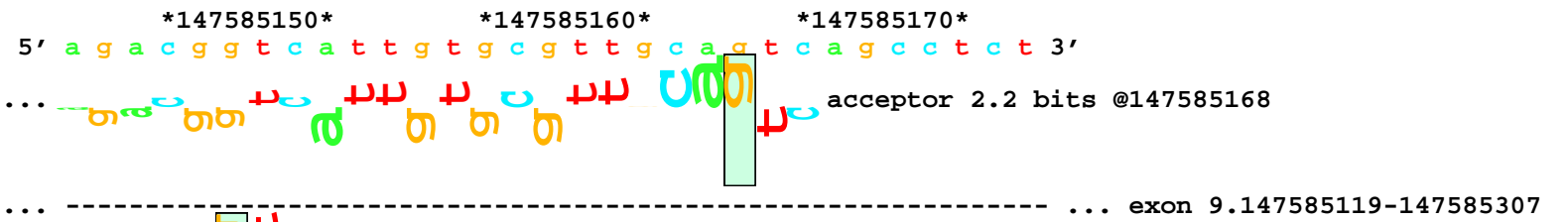
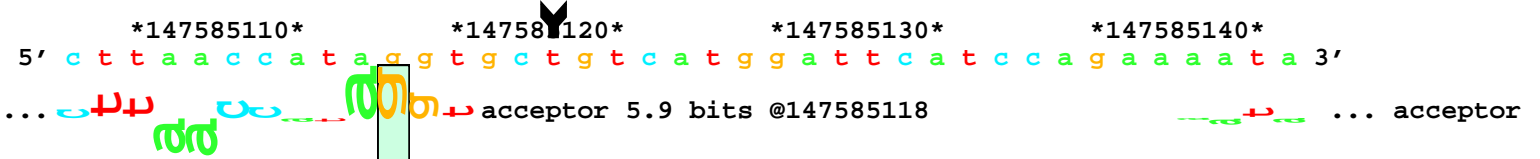
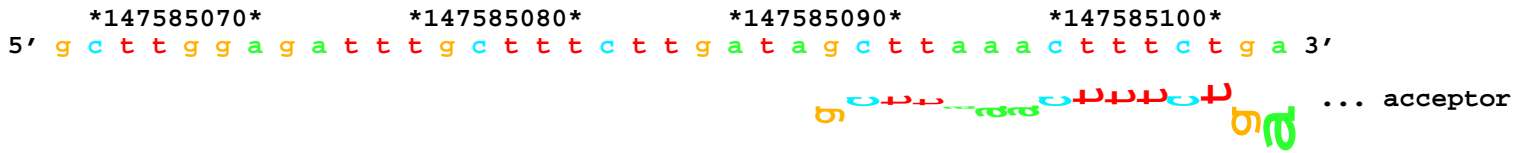
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 14, 1_14, c.679G>A g147585119a, config: linear, direction: +, begin: 147585065, end: 1475851



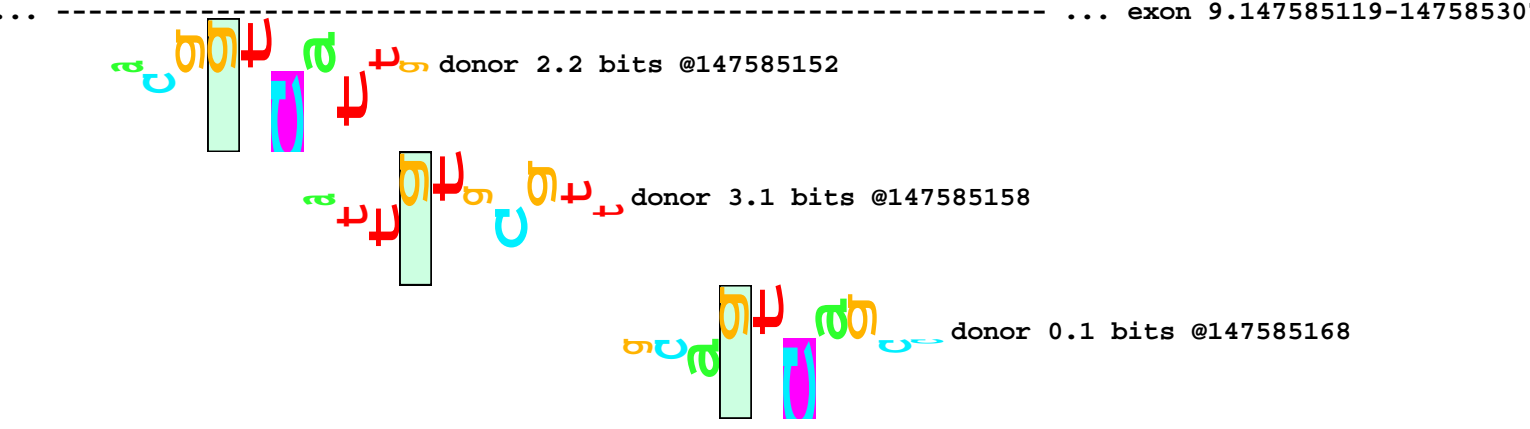
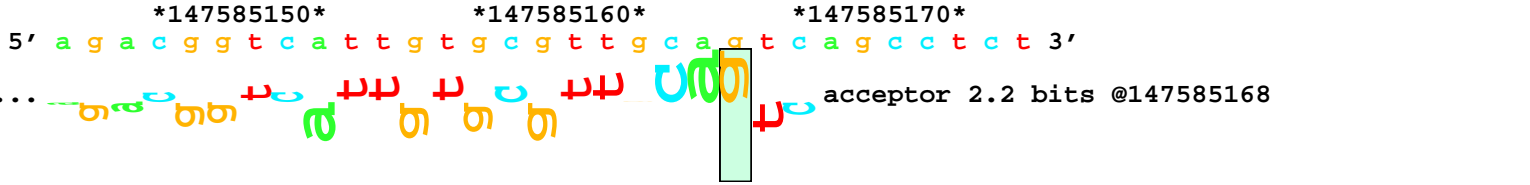
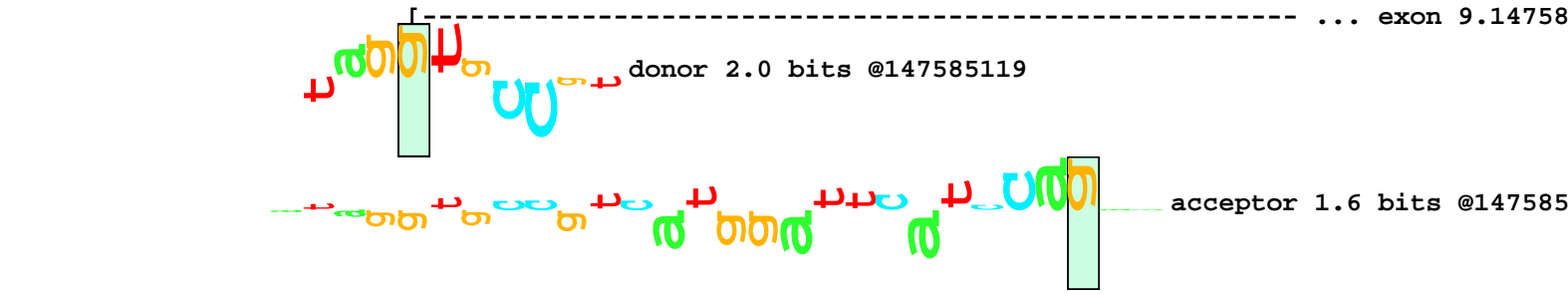
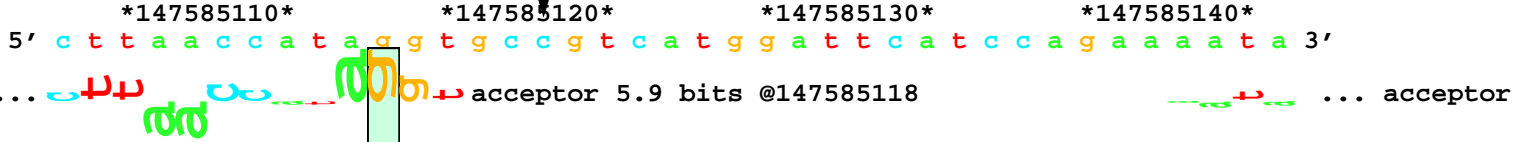
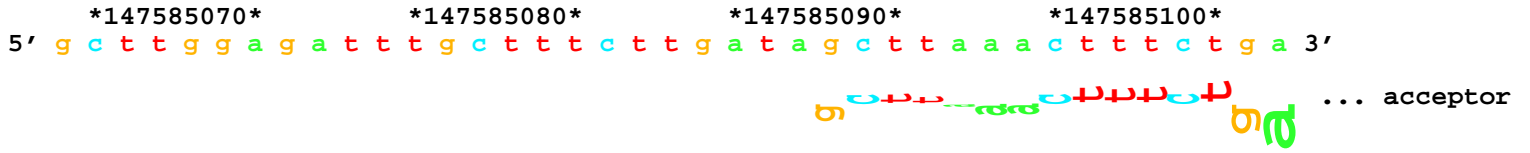
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 15, 1_15, piece 1, config: linear, direction: +, begin: 147585069, end: 147585177



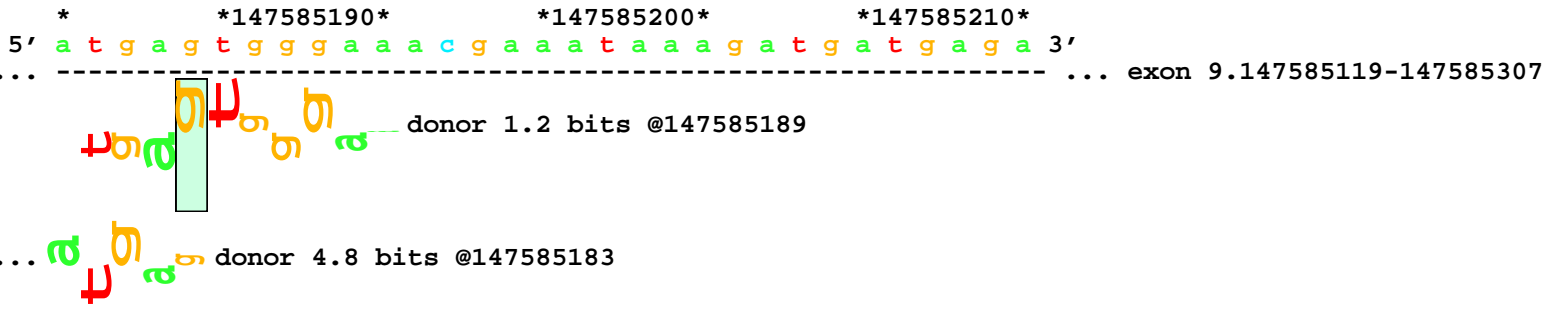
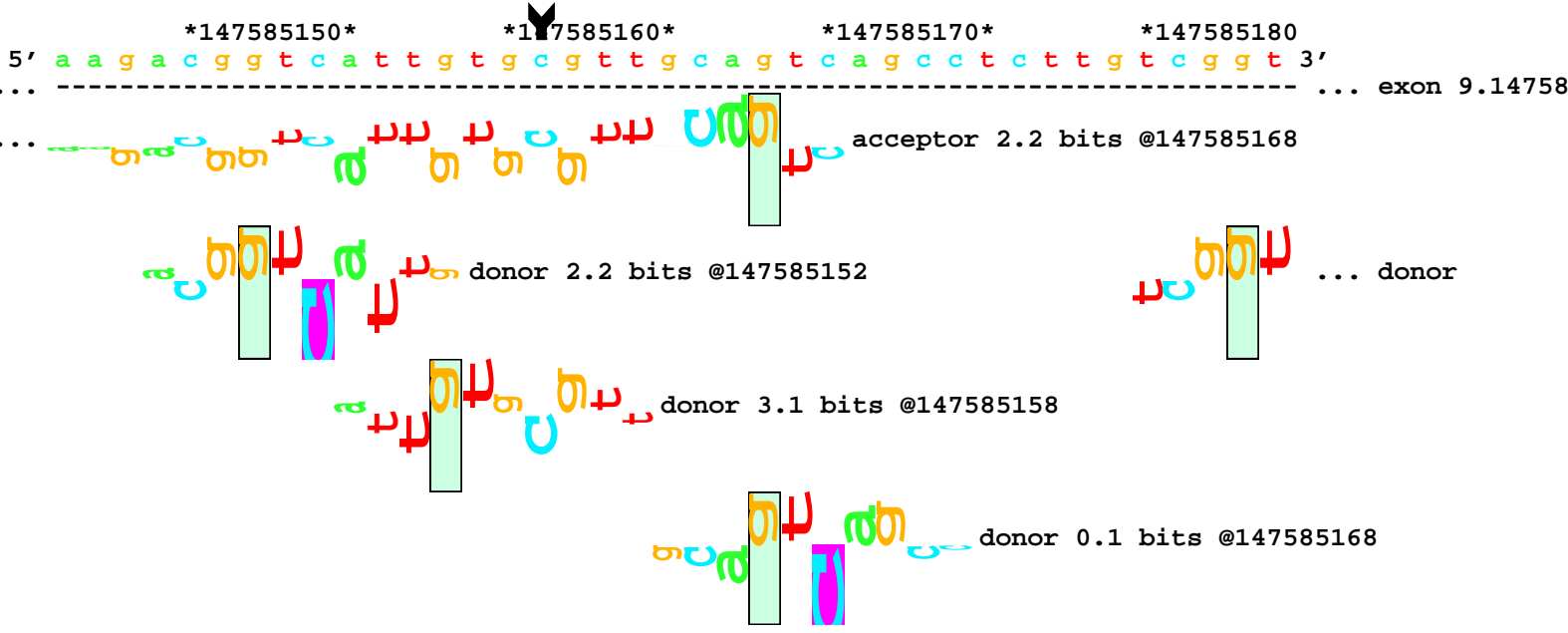
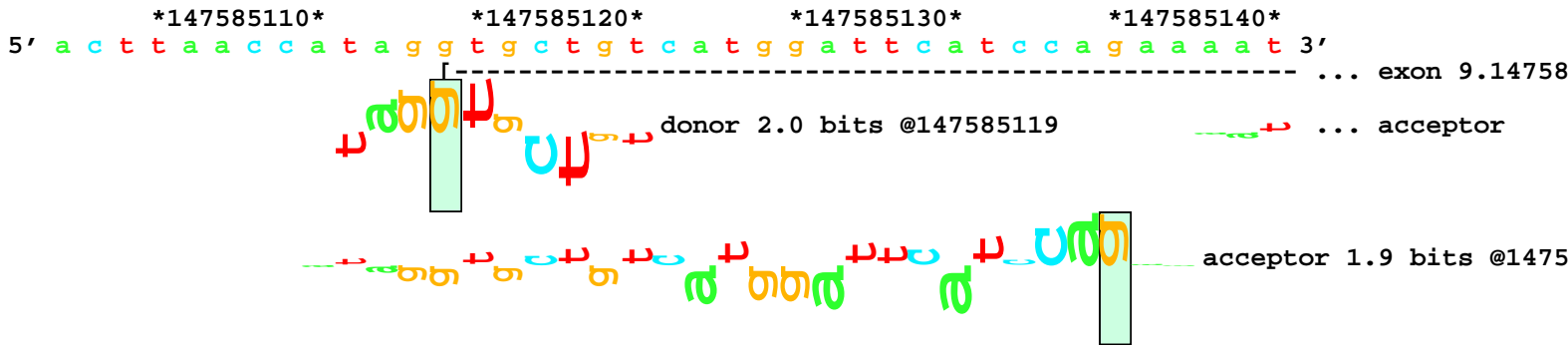
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 16, 1_16, c.683T>C t147585123c, config: linear, direction: +, begin: 147585069, end: 1475851



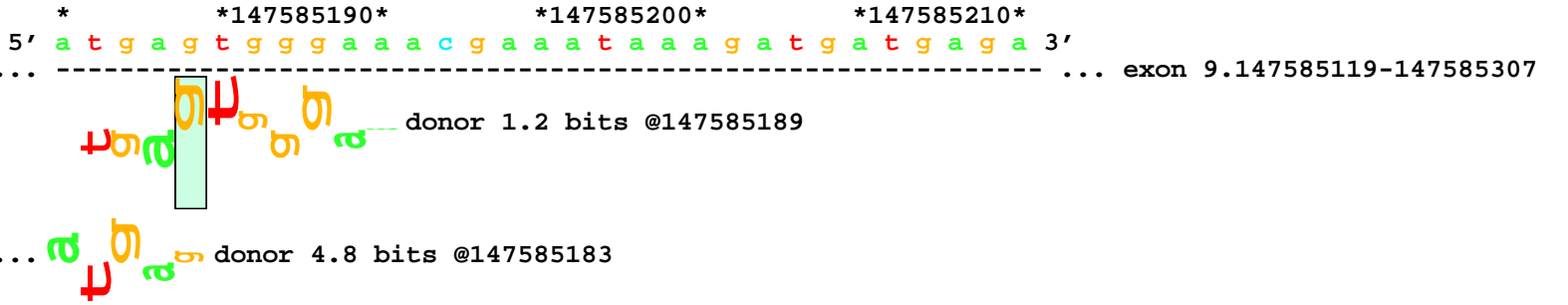
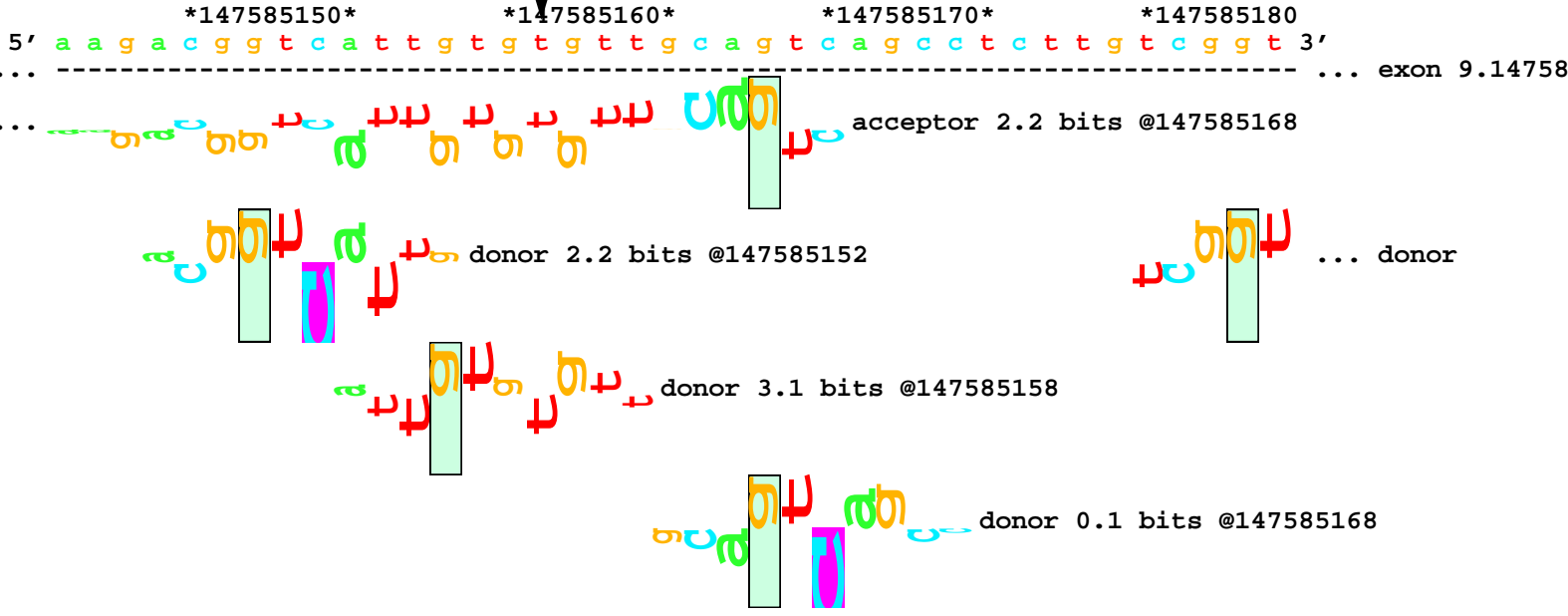
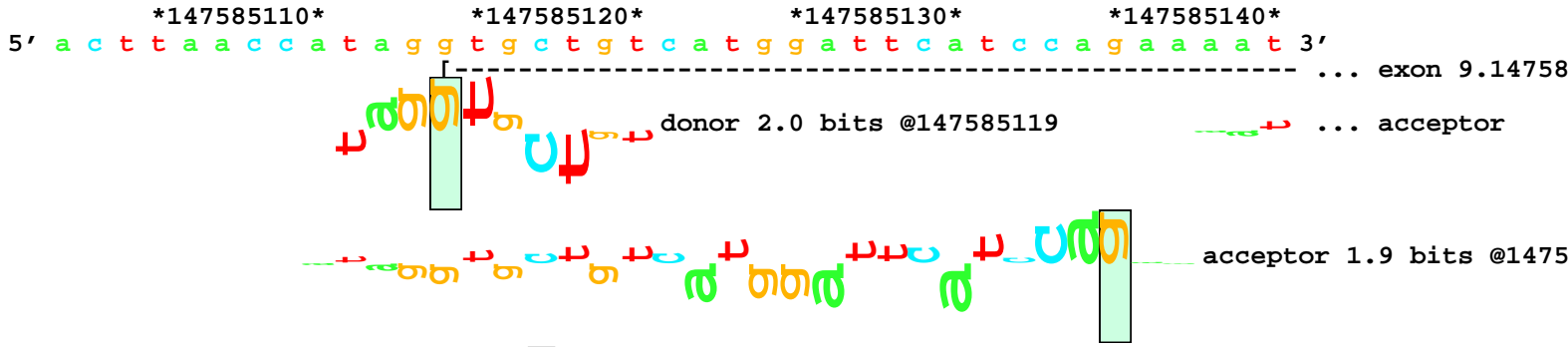
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 17, 1_17, piece 1, config: linear, direction: +, begin: 147585107, end: 147585215



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 18, 1_18, c.721C>T c147585161t, config: linear, direction: +, begin: 147585107, end: 1475852



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 19, 1_19, piece 1, config: linear, direction: +, begin: 147585222, end: 147585330

* 147585230* 147585240* 147585250* 147585260

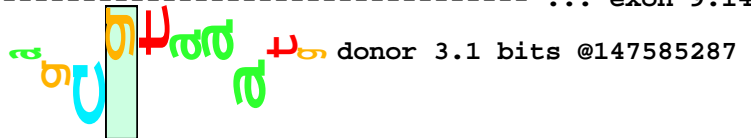
5' t c g a t g t t a t c a g g g a g a c t a a t a a a c a a a t t t c t a a a c 3'

... ----- ... exon 9.14758

* 147585270* 147585280* 147585290*

5' t c a c c a t t t a t g a t g c a a g a c c c a g c g t a a a t g c a g t g g 3'

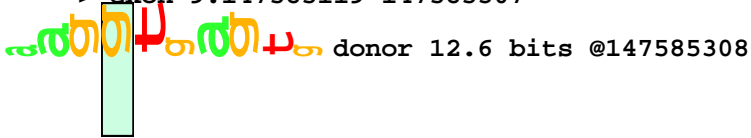
... ----- ... exon 9.14758



147585300 147585310* 147585320* 147585330

5' c c a a c a a g g t g a g t g g a c t t a a t g a t g t g c t 3'

... -----> exon 9.147585119-147585307

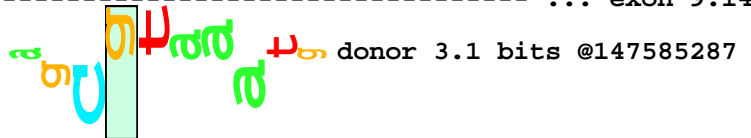


Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

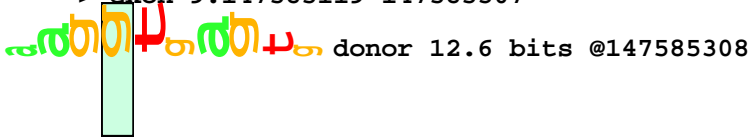
piece 20, 1_20, c.836C>G c147585276g, config: linear, direction: +, begin: 147585222, end: 1475853

147585230 *147585240* *147585250* *147585260
 5' t c g a t g t t a t c a g g g a g a c t a a t a a a c a a a t t t c t a a a c 3'
 ... ----- ... exon 9.14758

147585270 *147585280* *147585290*
 5' t c a c c a t t t t a t g a t g g a a g a c c c a g c g t a a a t g c a g t g g 3'
 ... ----- ... exon 9.14758



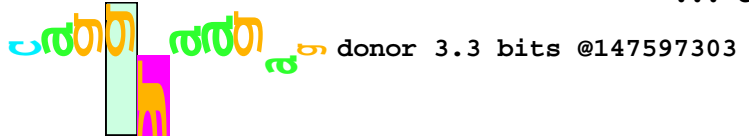
147585300 *147585310* *147585320* *147585330
 5' c c a a c a a g g t g a g t g g a c t t a a t g a t g t g c t 3'
 ... -----> exon 9.147585119-147585307



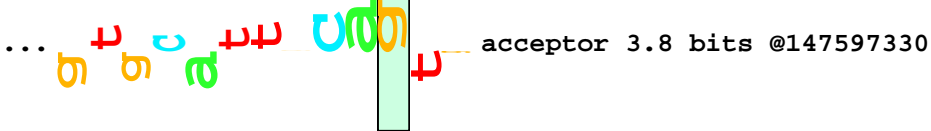
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 21, 1_21, piece 1, config: linear, direction: +, begin: 147597281, end: 147597389

5' g t a g c a g a c a a a g t t t c t t c a g g g a a g a g t t c a g t g c t t 3' ... exon 11.1475



147597320 *147597330* *147597340* *147597350*
5' g t g c a t t g c a g t g a c g g a t g g g a c a g g a c t g c t c a g c t g 3' ... exon 11.1475



147597360 *147597370* *147597380*
5' a c a t c c t t g g c c a t g c t g a t g t t g g a t a g c t 3' ... exon 11.147597257-147597463

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

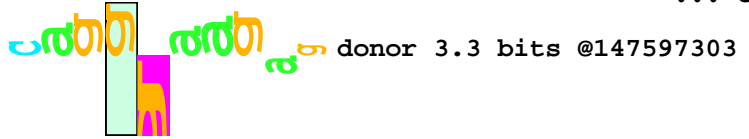
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

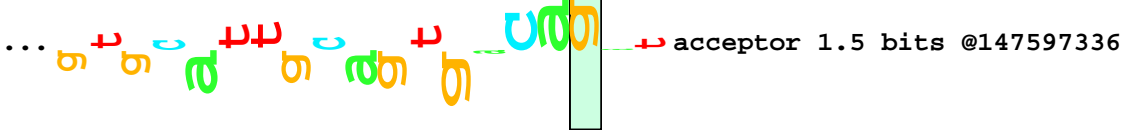
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 22, 1_22, c.1132G>A g147597335a, config: linear, direction: +, begin: 147597281, end: 147597

5' g t a g c a g a c a a a g t t t c t t c a g g g a a g a g t t c a g t g c t t 3' ... exon 11.1475



5' g t g c a t t g c a g t g a c a g a t g g g a c a g g a c t g c t c a g c t g 3' ... exon 11.1475



5' a c a t c c t t g g c c a t g c t g a t g t t g g a t a g c t 3' ... exon 11.147597257-147597463

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

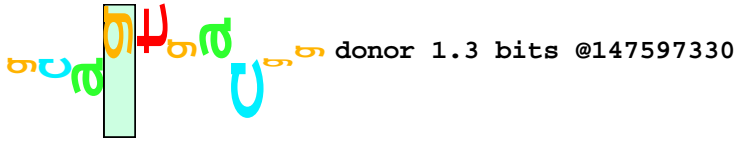
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

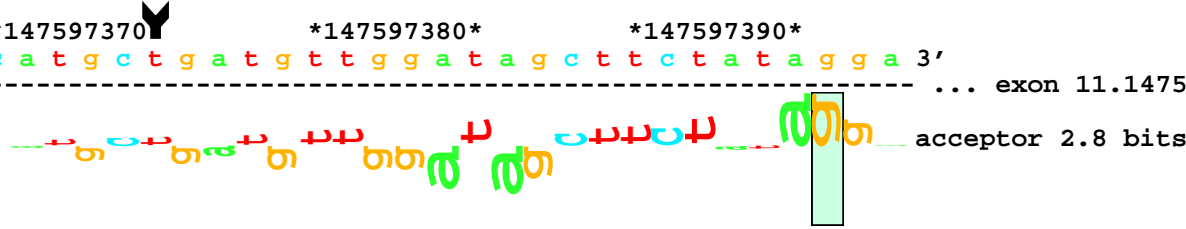
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 23, 1_23, piece 1, config: linear, direction: +, begin: 147597321, end: 147597429

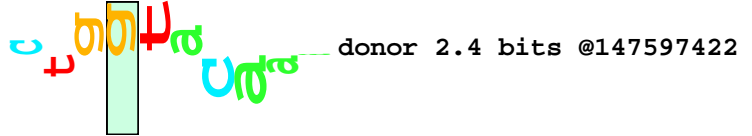
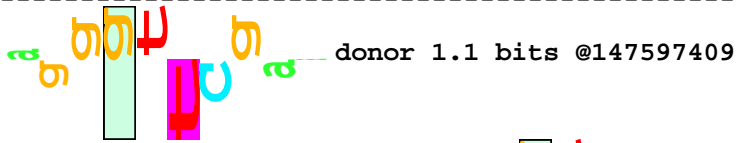
5' t g c a t t g c a g t g a c g g a t g g g a c a g g a c t g c t c a g c t g a 3' ... exon 11.1475



5' c a t c c t t g g c c a t g c t g a t g t t g g a t a g c t t c t a t a g g a 3' ... exon 11.1475



5' g c a t t g a a g g g t t c g a a a t a c t g g t a c a a a a 3' ... exon 11.147597257-147597463



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

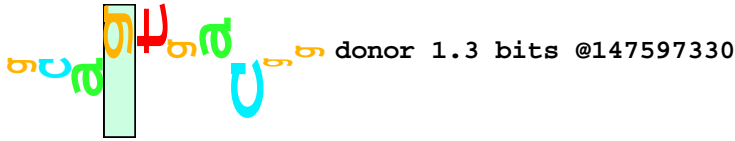
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 24, 1_24, c.1172T>C t147597375c, config: linear, direction: +, begin: 147597321, end: 147597375

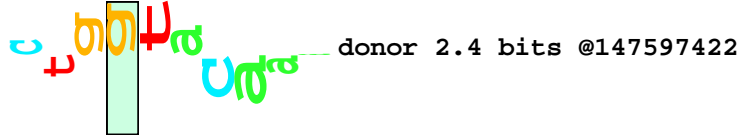
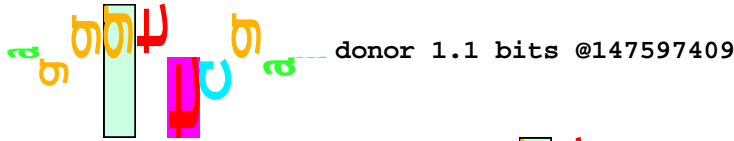
5' t g c a t t g c a g t g a c g g a t g g g a c a g g a c t g c t c a g c t g a 3' ... exon 11.1475



5' c a t c c t t g g c c a t g c c g a t g t t g g a t a g c t t c t a t a g g a 3' ... exon 11.1475



5' g c a t t g a a g g g t t c g a a a t a c t g g t a c a a a a 3' ... exon 11.147597257-147597463



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 25, 1_25, piece 1, config: linear, direction: +, begin: 147597339, end: 147597447


147597340 *147597350* *147597360* *147597370*
 5' g g g a c a g g a c t g c t c a g c t g a c a t c c t t g g c c a t g c t g a 3'
 ... ----- ... exon 11.1475

... acceptor

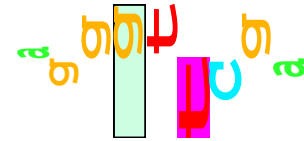


147597380 *147597390* *147597400* *147597410*
 5' t g t t g g a t a g c t t c t a t a g g a g c a t t g a a g g g t t c g a a a 3'
 ... ----- ... exon 11.1475

... acceptor 2.8 bits @147597396

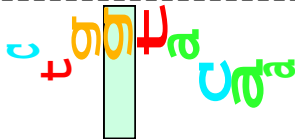


... donor 1.1 bits @147597400



147597420 *147597430* *147597440*
 5' t a c t g g t a c a a a a g a a t g g a t a a g t t t t g g 3'
 ... ----- ... exon 11.147597257-147597463

... donor 2.4 bits @147597422



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 26, 1_26, c.1190A>G a147597393g, config: linear, direction: +, begin: 147597339, end: 147597

147597340 *147597350* *147597360* *147597370*
5' g g g a c a g g a c t g c t c a g c t g a c a t c c t t g g c c a t g c t g a 3'
... ----- ... exon 11.1475

... acceptor

147597380 *147597390* *147597400* *147597410*
5' t g t t g g a t a g c t t c t g t a g g a g c a t t g a a g g g t t c g a a a 3'
... ----- ... exon 11.1475

... acceptor 2.9 bits @147597396

... donor 2.0 bits @147597393

... donor 1.1 bits @147

147597420 *147597430* *147597440*
5' t a c t g g t a c a a a a a g a a t g g a t a a g t t t t g g 3'
... ----- ... exon 11.147597257-147597463

... donor 2.4 bits @147597422

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

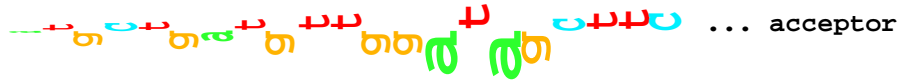
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

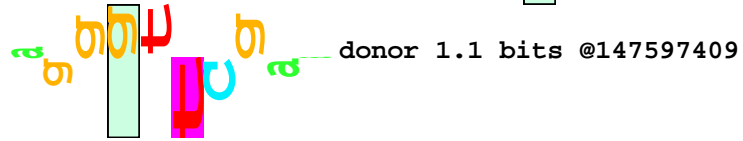
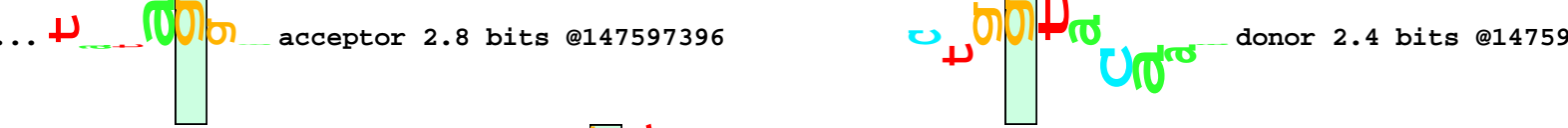
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 27, 1_27, piece 1, config: linear, direction: +, begin: 147597353, end: 147597461

* 147597360* 147597370* 147597380* 147597390
 5' c a g c t g a c a t c c t t g g c c a t g c t g a t g t t g g a t a g c t t c 3'
 ... ----- ... exon 11.1475



* 147597400* 147597410* 147597420* 147597430
 5' t a t a g g a g c a t t g a a g g g t t c g a a a t a c t g g t a c a a a a a 3'
 ... ----- ... exon 11.1475



* 147597440* 147597450* 147597460
 5' g a a t g g a t a a g t t t t g g a c a t a a a t t t g c a t 3'
 ... ----- ... exon 11.147597257-147597463

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

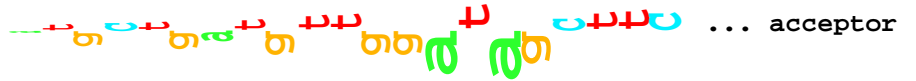
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

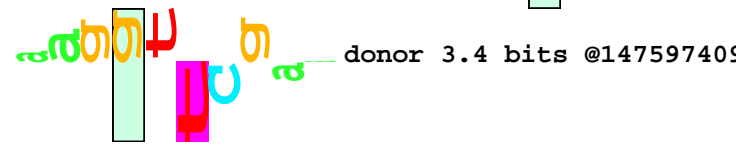
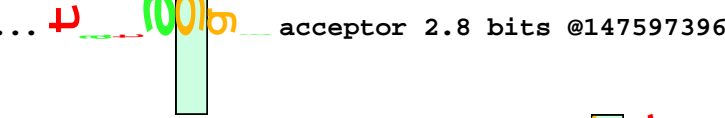
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 28, 1_28, c.1204G>A g147597407a, config: linear, direction: +, begin: 147597353, end: 147597

5' * c a g c t g a c a t c c t t g g c c a t g c t g a t g t t g g a t a g c t t c 3' *147597360* *147597370* *147597380* *147597390
... ----- ... exon 11.1475



5' * t a t a g g a g c a t t g a a a g g t t c g a a a t a c t g g t a c a a a a a 3' *147597400* *147597410* *147597420* *147597430
... ----- ... exon 11.1475



5' * g a a t g g a t a a g t t t t g g a c a t a a a t t t g c a t 3' *147597440* *147597450* *147597460
... ----- ... exon 11.147597257-147597463

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

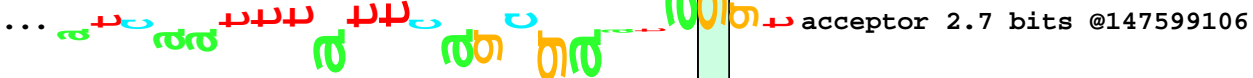
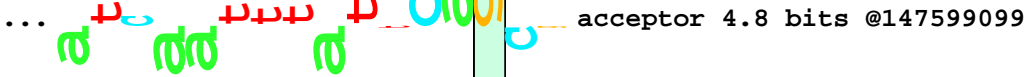
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 29, 1_29, piece 1, config: linear, direction: +, begin: 147599047, end: 147599155

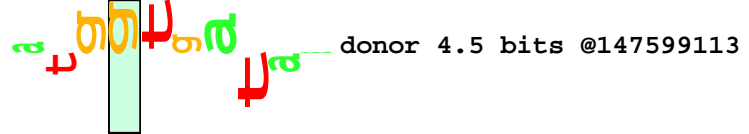
5' ***147599050*** ***147599060*** ***147599070*** ***147599080***
t c t c a g t t t t g t a c c c a t t a a t t a a a a c a a a t t a t c t t c 3'



5' ***147599090*** ***147599100*** ***147599110*** ***147599120***
a t c a a t t t a t t c a g c g a a t a g g t c a t g g t g a t a a a a c c c 3'



----- ... exon 12.1475



5' ***147599130*** ***147599140*** ***147599150***
a c a c c g a t g c t g a c c g t t c t c c t a t t t t t c t 3'

----- ... exon 12.147599100-147599192

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

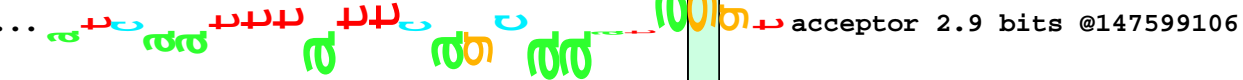
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 30, 1_30, c.1262G>A g147599101a, config: linear, direction: +, begin: 147599047, end: 147599

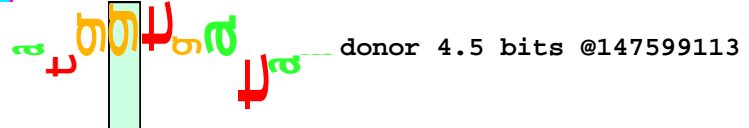
147599050 *147599060* *147599070* *147599080*
5' t c t c a g t t t t g t a c c c a t t a a t t a a a a c a a a t t a t c t t c 3'



147599090 *147599100* *147599110* *147599120*
5' a t c a a t t t a t t c a g c a a a t a g g t c a t g g t g a t a a a a c c c 3'



[----- ... exon 12.1475

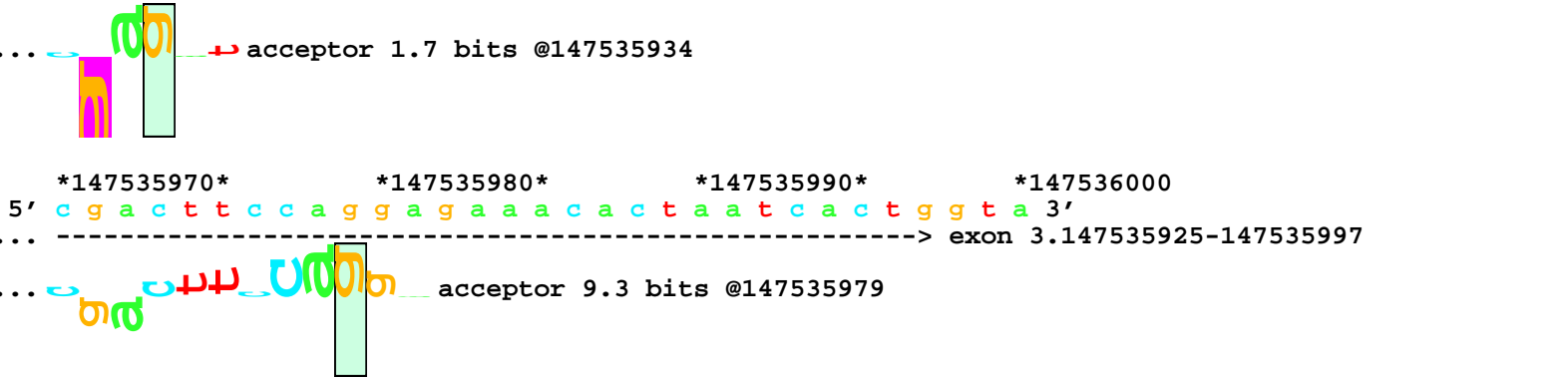
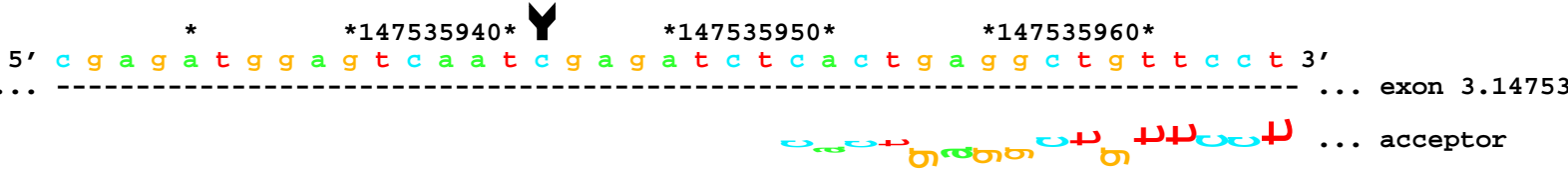
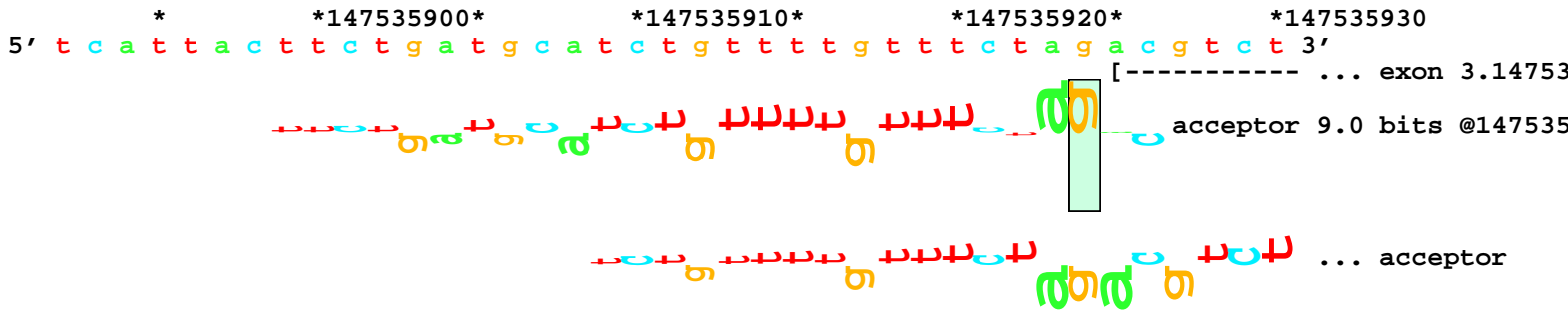


* *147599130* *147599140* *147599150*
5' a c a c c g a t g c t g a c c g t t c t c c t a t t t t t c t 3'

... ----- ... exon 12.147599100-147599192

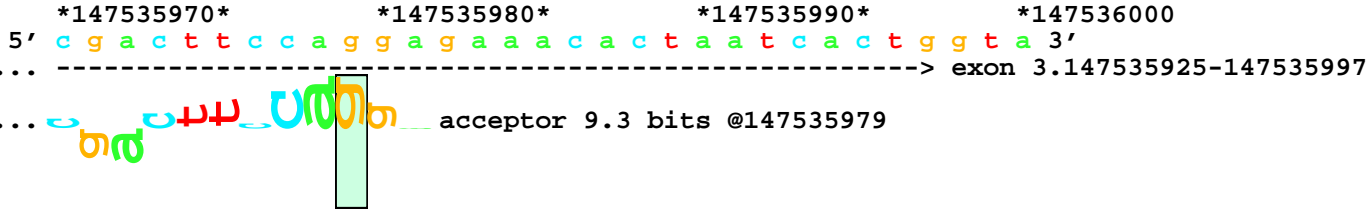
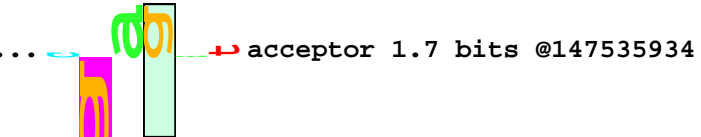
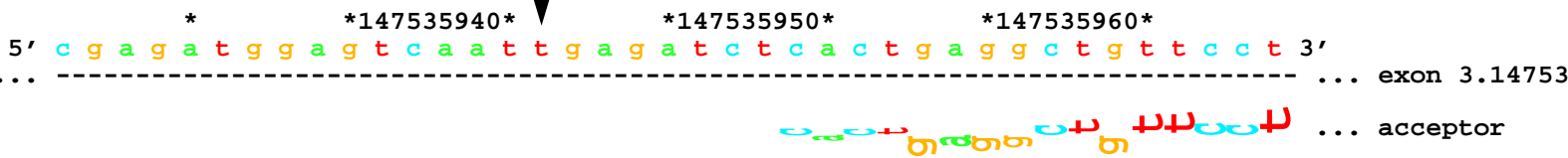
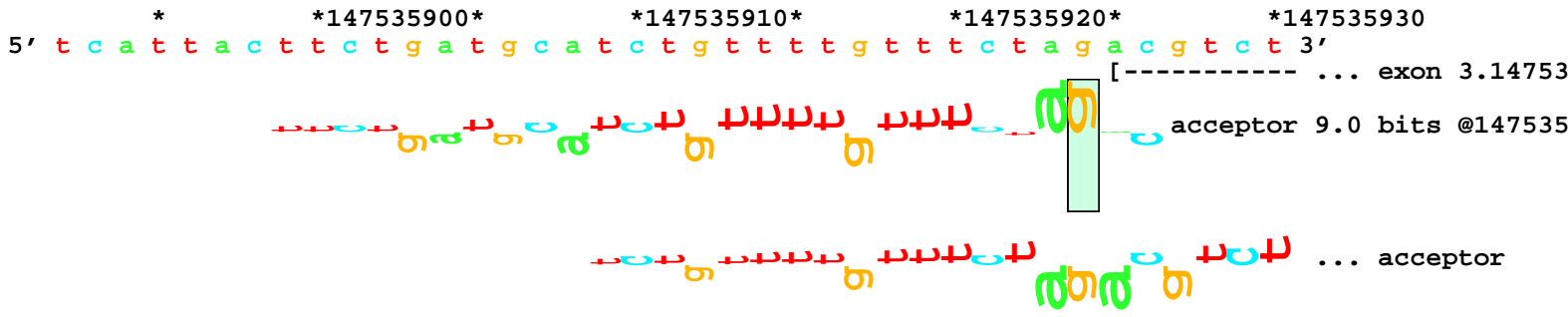
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 31, 1_31, piece 1, config: linear, direction: +, begin: 147535892, end: 147536000



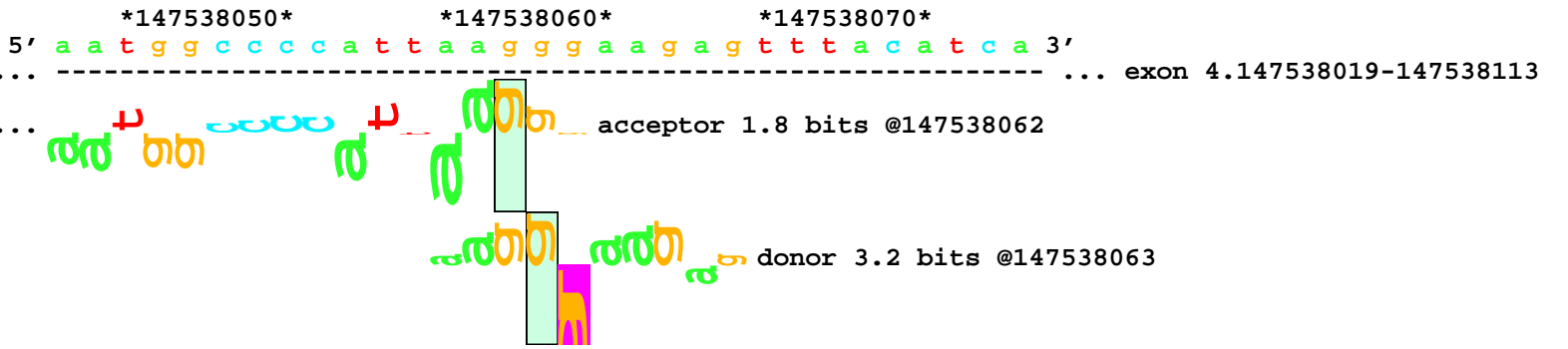
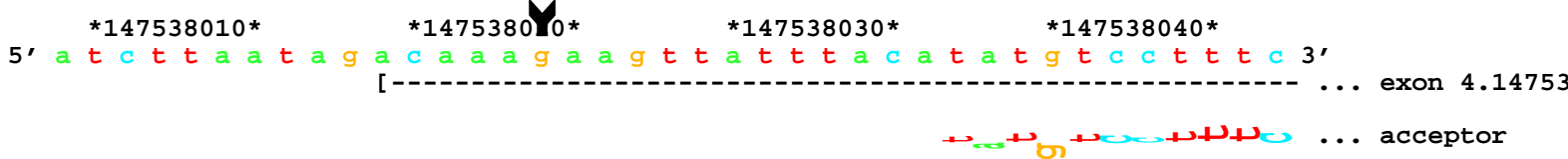
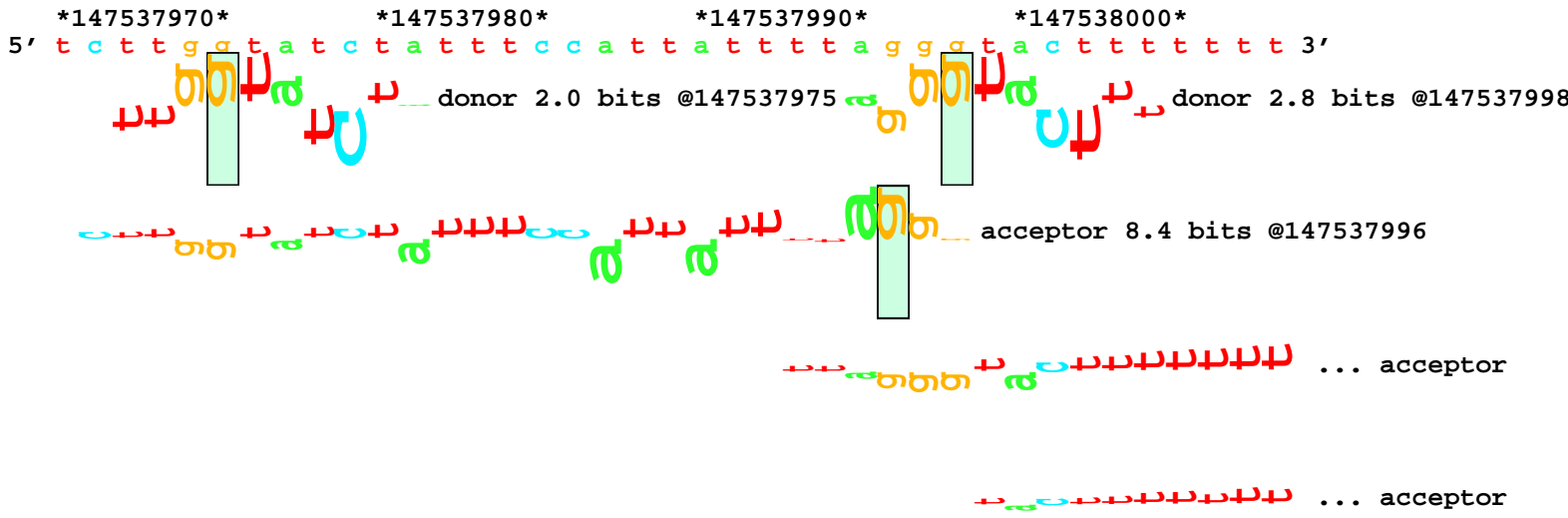
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 32, 1_32, c.85C>T c147535946t, config: linear, direction: +, begin: 147535892, end: 14753600

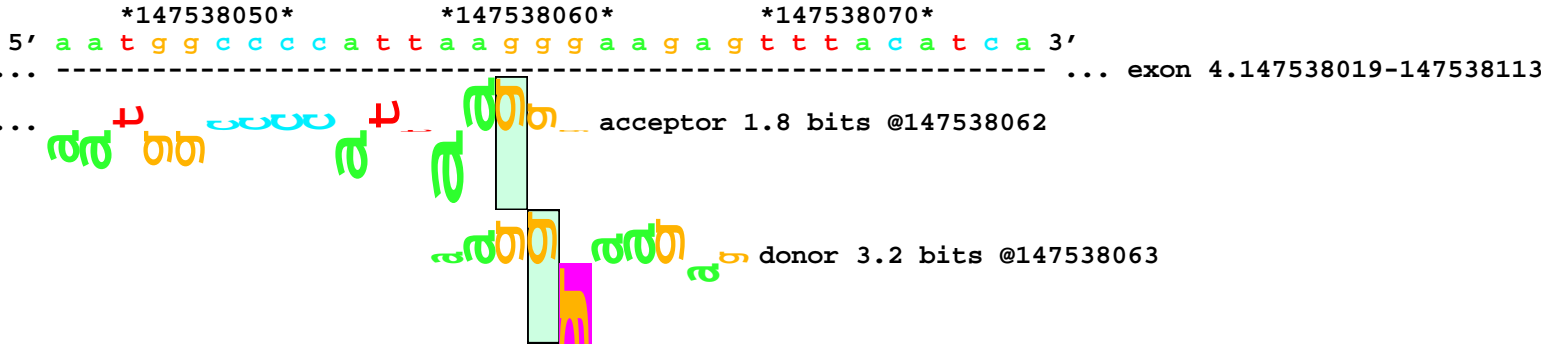
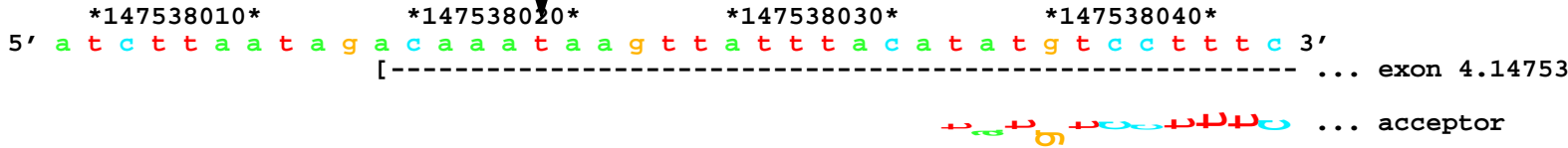
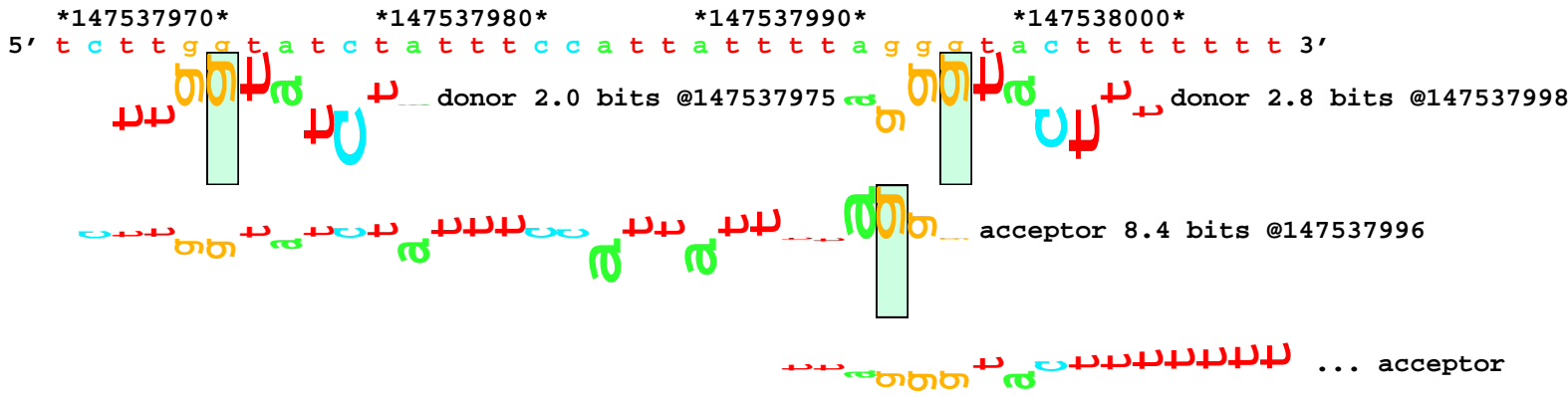


Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 35, 1_35, piece 1, config: linear, direction: +, begin: 147537970, end: 147538078

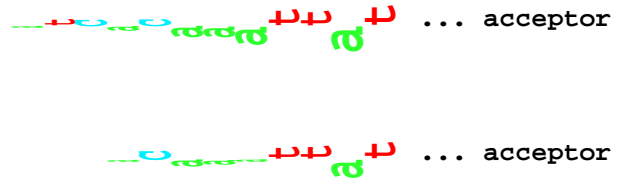
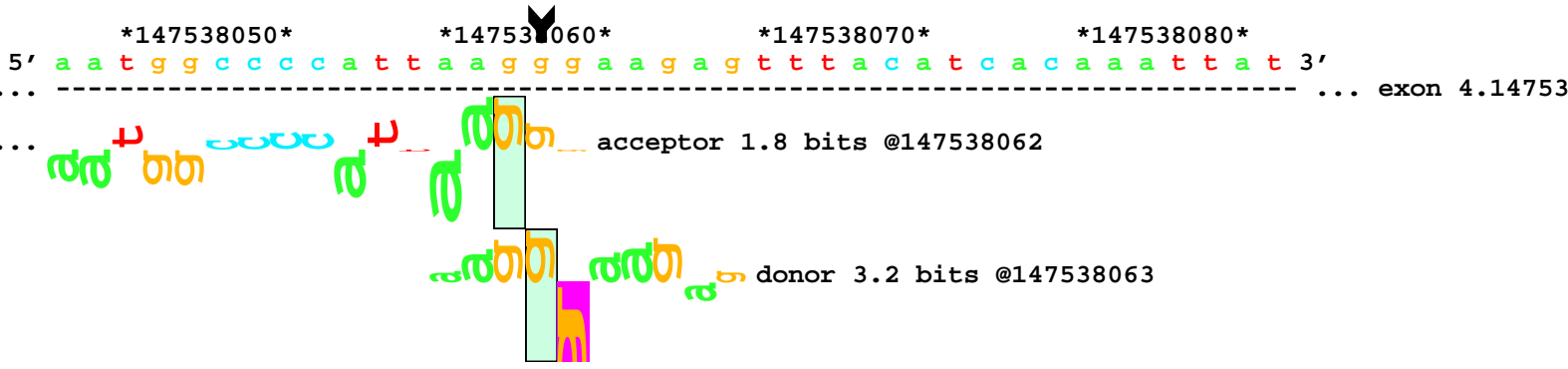
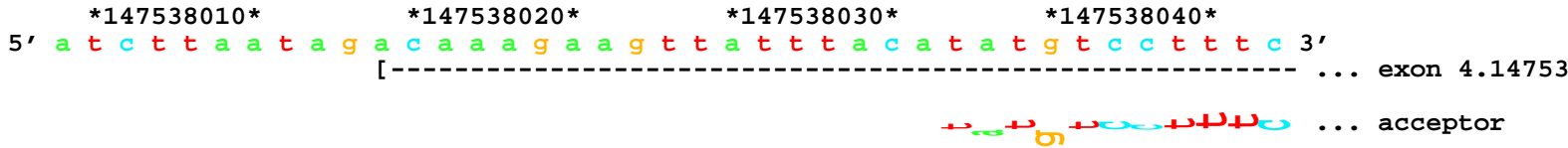


piece 36, 1_36, c.142G>T g147538024t, config: linear, direction: +, begin: 147537970, end: 1475380



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

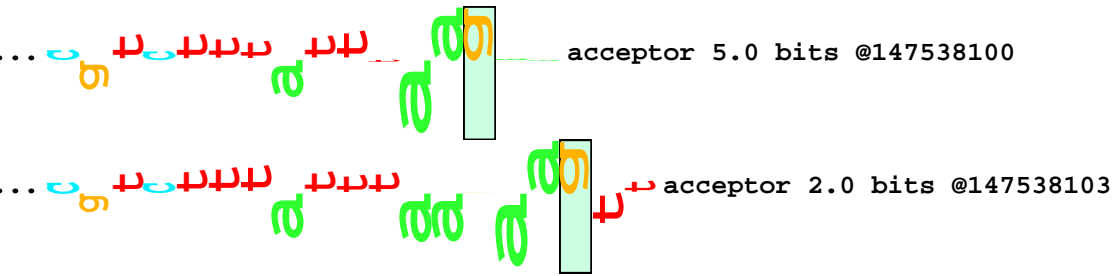
piece 37, 1_37, piece 1, config: linear, direction: +, begin: 147538009, end: 147538117



147538090 *147538100* *147538110*

5' c g t c t t t a t t t a a g a a g t t t g g a a a c g g t a a 3'

... -----> exon 4.147538019-147538113



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 38, 1_38, c.181G>T g147538063t, config: linear, direction: +, begin: 147538009, end: 147538113

147538010 *147538020* *147538030* *147538040*

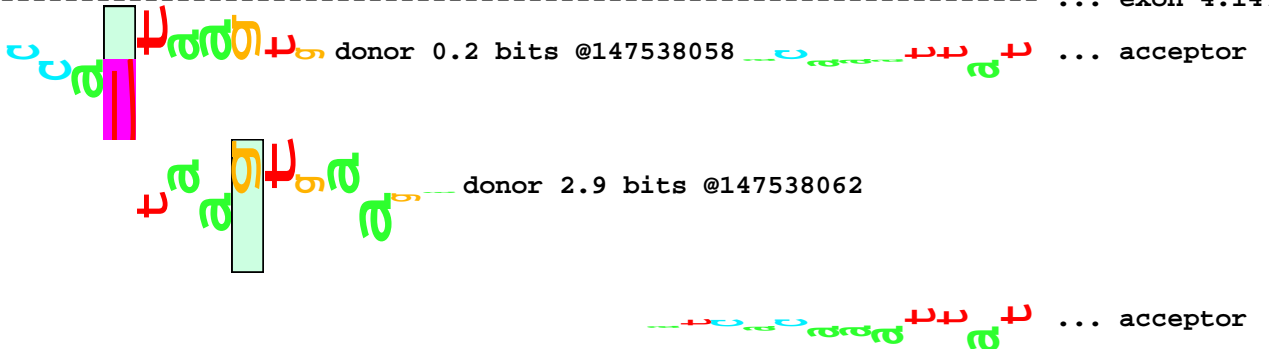
5' a t c t t a a t a g a c a a a g a a g t t a t t t a c a t a t g t c c t t t c 3'

[-----] ... exon 4.14753

147538050 *147538060* *147538070* *147538080*

5' a a t g g c c c c a t t a a g t g a a g a g t t t a c a t c a c a a a t t a t 3'

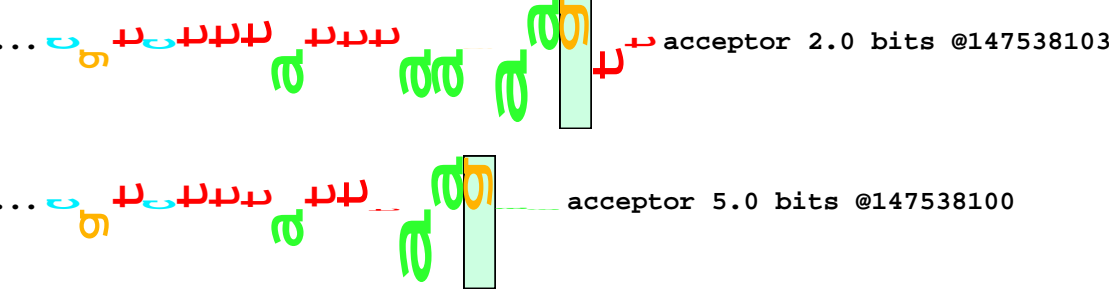
... exon 4.14753



147538090 *147538100* *147538110*

5' c g t c t t t a t t t a a g a a g t t t g g a a c g g t a a 3'

... exon 4.147538019-147538113



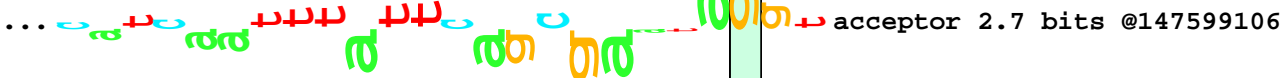
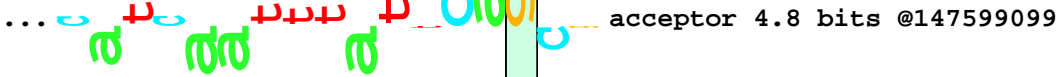
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 39, 1_39, piece 1, config: linear, direction: +, begin: 147599046, end: 147599154

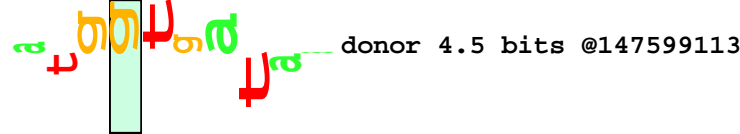
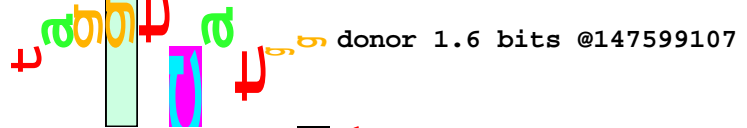
5' ***147599050*** ***147599060*** ***147599070*** ***147599080***
t t c t c a g t t t t g t a c c c a t t a a t t a a a a c a a a t t a t c t t 3'



***** ***147599090*** ***147599100*** ***147599110*** ***147599120***
5' c a t c a a t t t a t t c a g c g a a t a g g t c a t g g t g a t a a a a a c 3'



----- ... exon 12.1475



***** ***147599130*** ***147599140*** ***147599150***
5' c a c a c c g a t g c t g a c c g t t c t c c t a t t t t t c 3'

----- ... exon 12.147599100-147599192

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 40, l_40, c.1261C>T c147599100t, config: linear, direction: +, begin: 147599046, end: 147599

5' ***147599050*** t t c t c a g t t t t g t a c c c a t t a a t t a a a a c a a a t t a t c t t 3' ***147599060*** ***147599070*** ***147599080***

... acceptor

... acceptor

5' ***147599090*** c a t c a a t t t t a t t c a g t g a a t a g g t c a t g g t g a t a a a a a c 3' ***147599100*** ***147599110*** ***147599120***

... acceptor 4.5 bits @147599099

... acceptor 2.9 bits @147599106

... exon 12.1475

donor 2.1 bits @147599099

donor 1.6 bits @147599107

donor 4.5 bits @147599113

5' ***147599130*** c a c a c c g a t g c t g a c c g t t c t c c t a t t t t t c 3' ***147599140*** ***147599150***

... exon 12.147599100-147599192

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

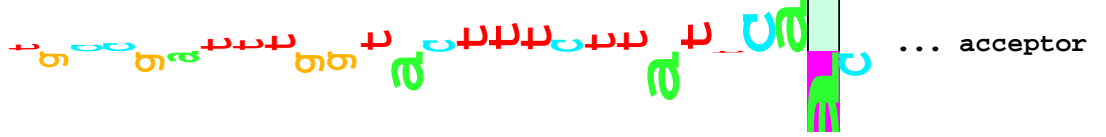
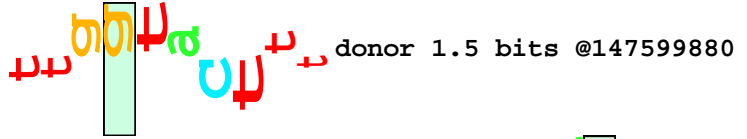
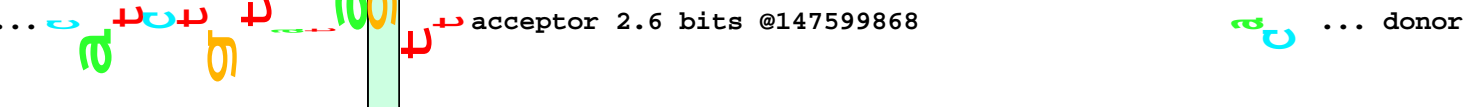
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 41, 1_41, piece 1, config: linear, direction: +, begin: 147599819, end: 147599927

5' ***147599820*** t t t g a a t t c a a t g a a c a a t t t t t g a t t a t a a t t t t g g a t 3' ***147599830*** ***147599840*** ***147599850*** ... exon 13.1475



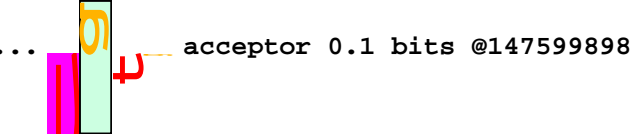
5' ***147599860*** c a t c t g t a t a g t t g c c g a t t t g g t a c t t t c t t a t t c a a c 3' ***147599870*** ***147599880*** ***147599890*** ... exon 13.1475



5' ***147599900*** t g t g a a t c t g c t c g a g a a a g a c a g g t g a g t t 3' ***147599910*** ***147599920*** ... exon 13.147599807-147599920



... acceptor 0.4 bits @147599895



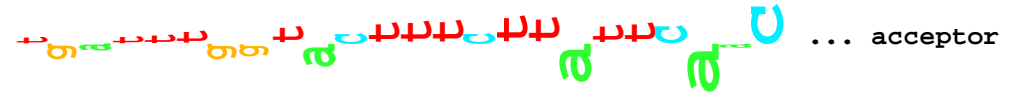
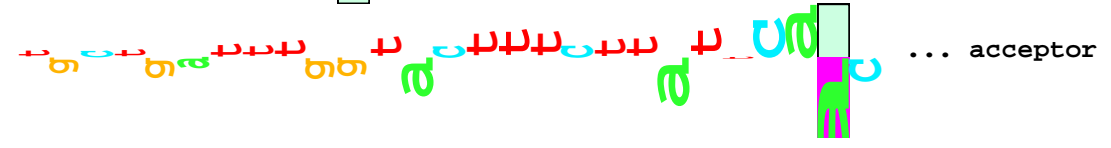
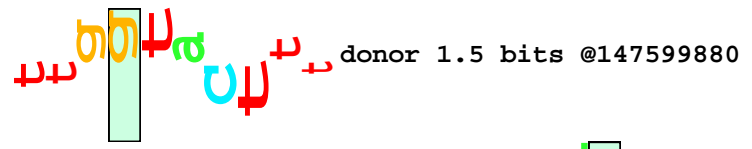
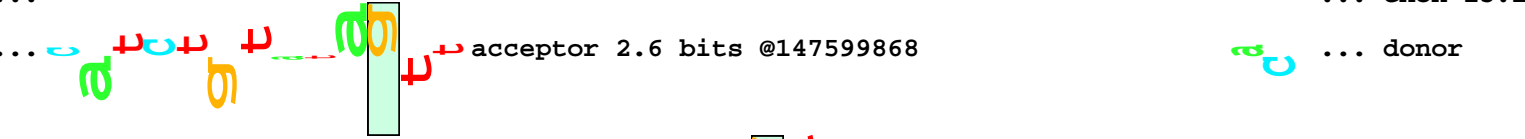
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 42, 1_42, c.1420C>T c147599873t, config: linear, direction: +, begin: 147599819, end: 147599

147599820 *147599830* *147599840* *147599850*
5' t t t g a a t t c a a t g a a c a a t t t t t g a t t a t a a t t t t g g a t 3'
... exon 13.1475



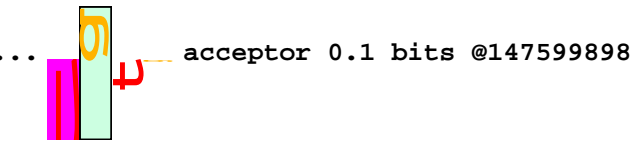
147599860 *147599870* *147599880* *147599890*
5' c a t c t g t a t a g t t g c t g a t t t g g t a c t t t c t t a t t c a a c 3'
... exon 13.1475



147599900 *147599910* *147599920*
5' t g t g a a t c t g c t c g a g a a a g a c a g g t g a g t t 3'
... exon 13.147599807-147599920



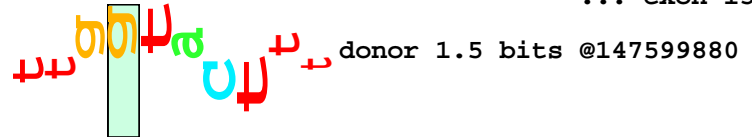
... acceptor 0.4 bits @147599895



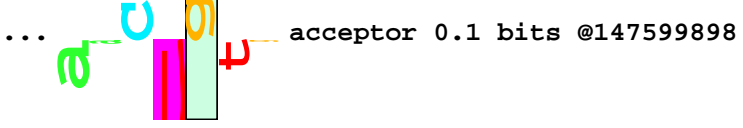
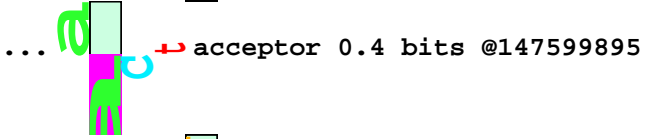
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 43, 1_43, piece 1, config: linear, direction: +, begin: 147599855, end: 147599963

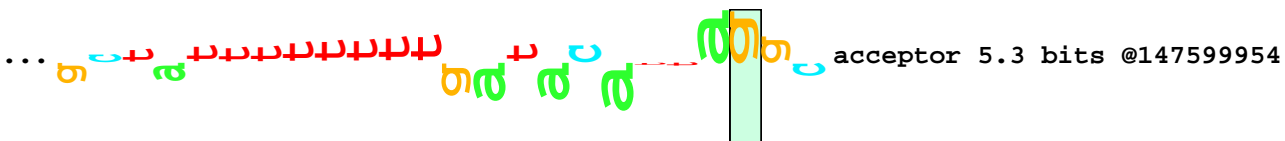
* 147599860* 147599870* 147599880* 147599890
5' g a t c a t c t g t a t a g t t g c c g a t t t g g t a c t t t c t t a t t c 3'
... ----- ... exon 13.1475



* 147599900* 147599910* 147599920* 147599930
5' a a c t g t g a a t c t g c t c g a g a a a g a c a g g t g a g t t a a a a t 3'
... ----- > exon 13.147599807-147599920



* 147599940* 147599950* 147599960
5' g c t a t t t t t t t t g a t a c a t t a g g c t t g c c a a 3'



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

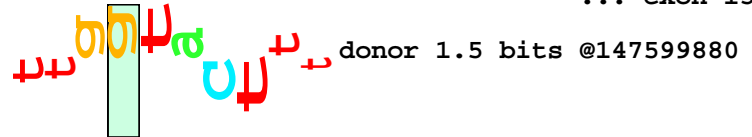
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

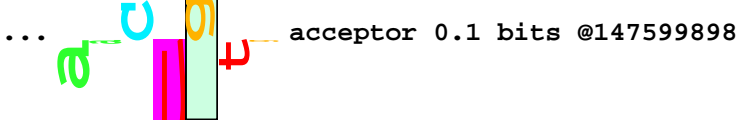
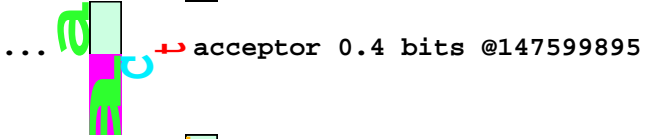
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 44, 1_44, c.1456C>T c147599909t, config: linear, direction: +, begin: 147599855, end: 147599

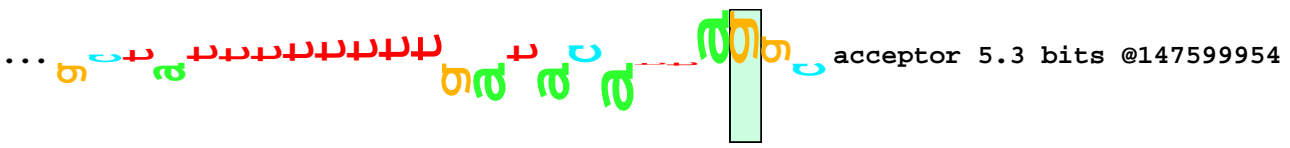
* 147599860* 147599870* 147599880* 147599890
5' g a t c a t c t g t a t a g t t g c c g a t t t g g t a c t t t c t t a t t c 3'
... exon 13.1475



* 147599900* 147599910* 147599920* 147599930
5' a a c t g t g a a t c t g c t t g a g a a a g a c a g g t g a g t t a a a a t 3'
... exon 13.147599807-147599920



* 147599940* 147599950* 147599960
5' g c t a t t t t t t t t g a t a c a t t a g g c t t g c c a a 3'



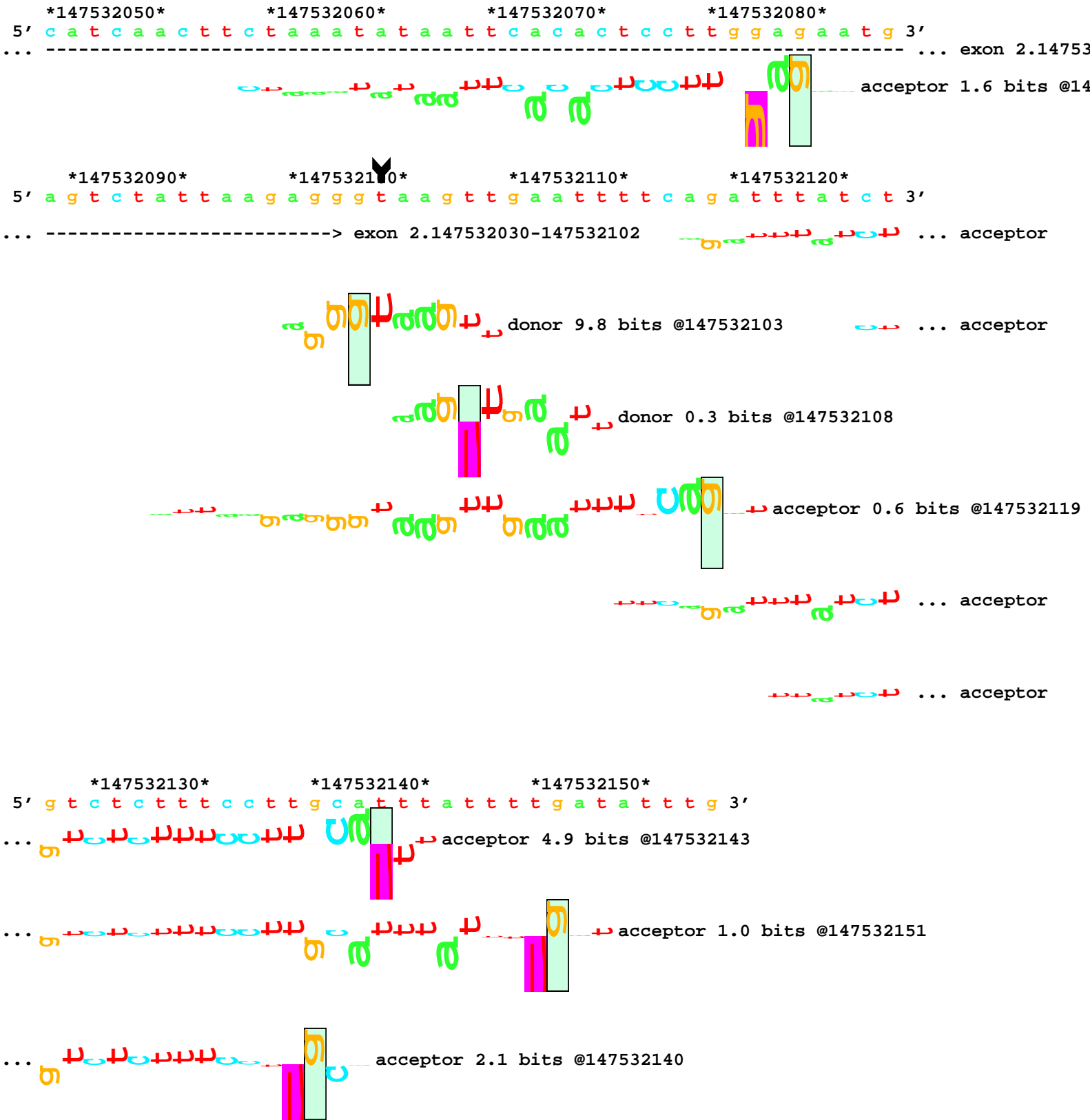
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

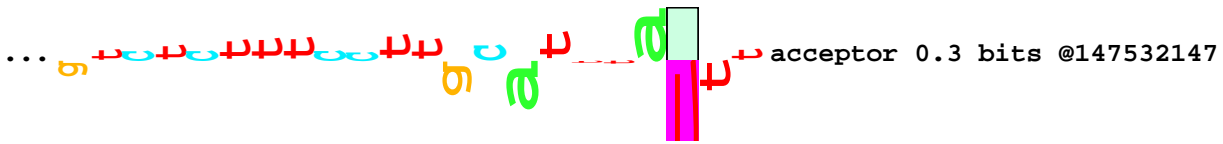
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 45, 1_45, piece 1, config: linear, direction: +, begin: 147532050, end: 147532158





Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

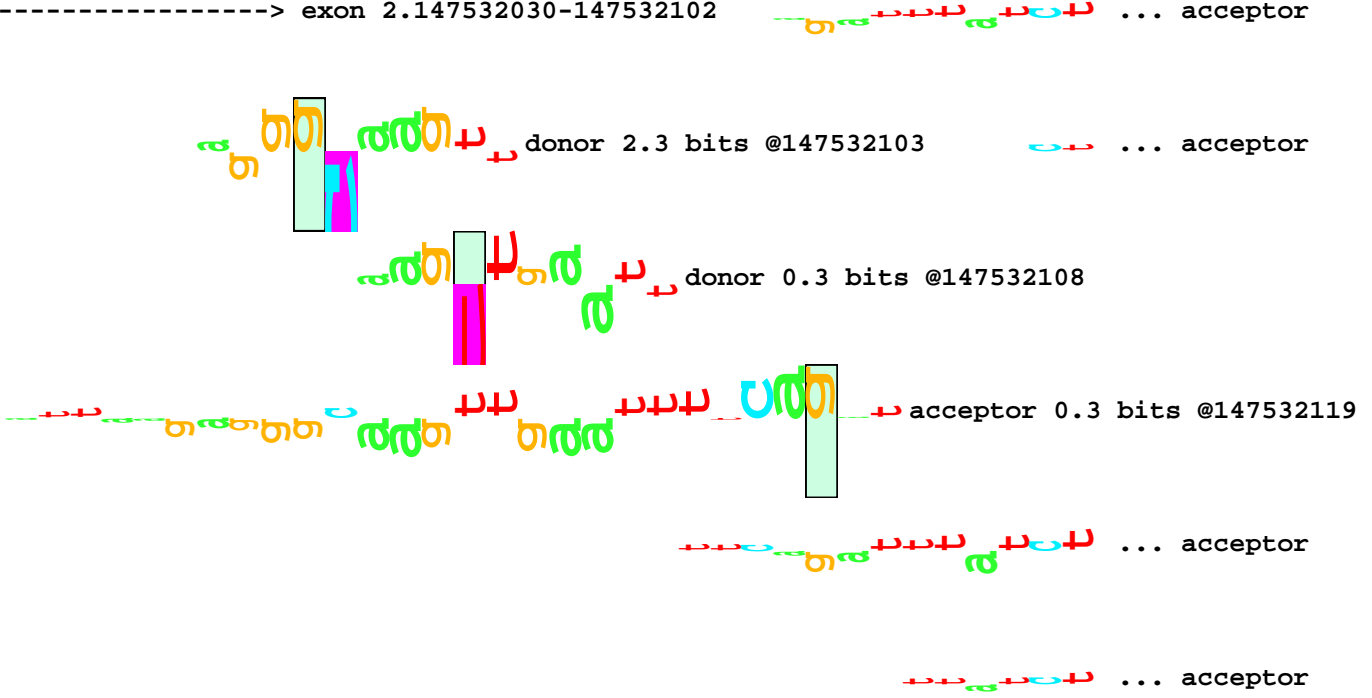
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 46, 1_46, c.63+2T>C t147532104c, config: linear, direction: +, begin: 147532050, end: 147532104

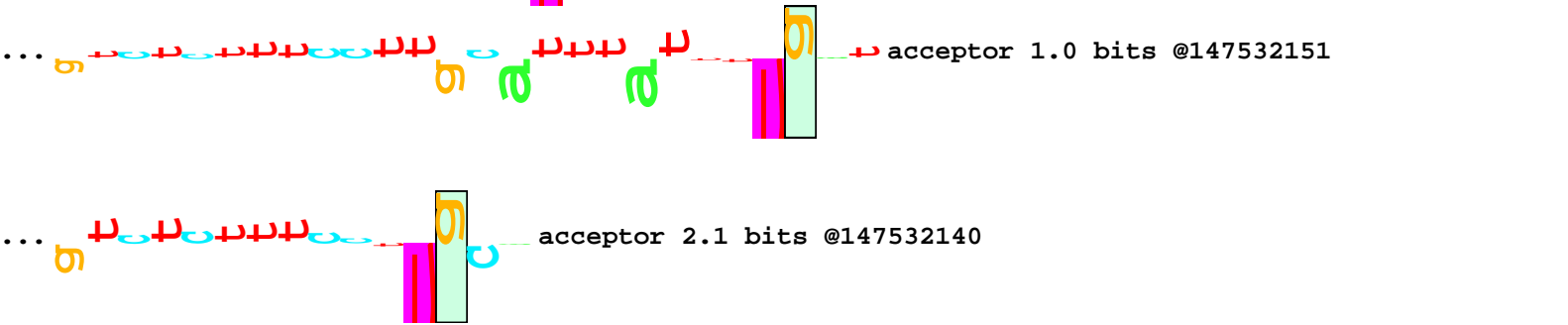
147532050 *147532060* *147532070* *147532080*
5' c a t c a a c t t c t a a a t a t a a t t c a c a c t c c t t g g a g a a t g 3'
... -----> exon 2.147532050-147532080



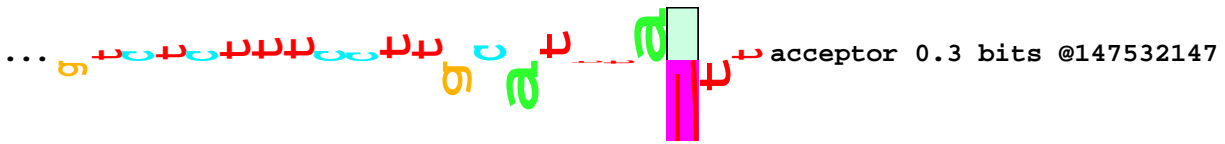
147532090 *147532100* *147532110* *147532120*
5' a g t c t a t t a a g a g g g c a a g t t g a a t t t t c a g a t t t a t c t 3'
... -----> exon 2.147532090-147532120



147532130 *147532140* *147532150*
5' g t c t c t t t c c t t g c a t t t a t t t t g a t a t t t g 3'
... -----> exon 2.147532130-147532150



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>



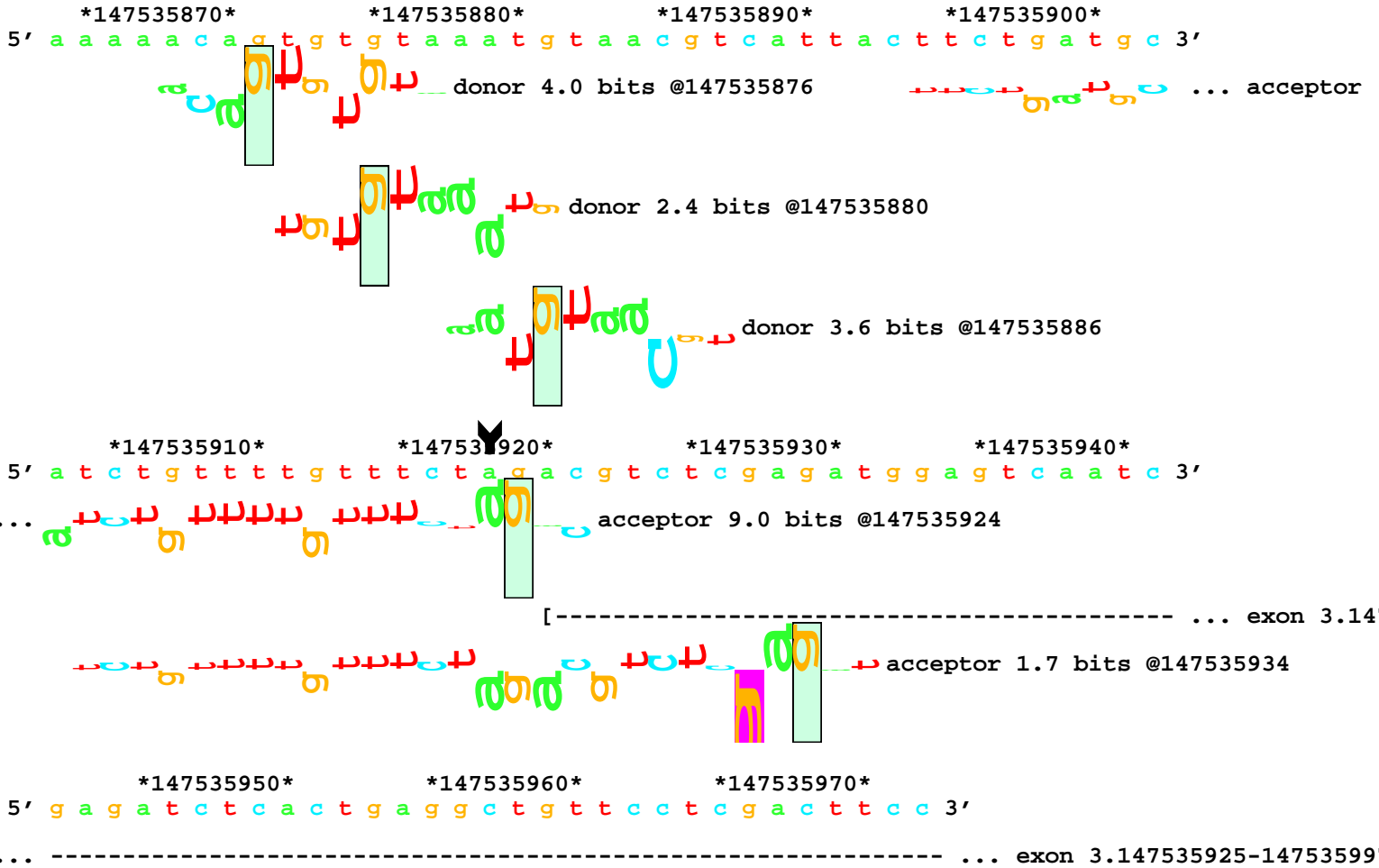
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

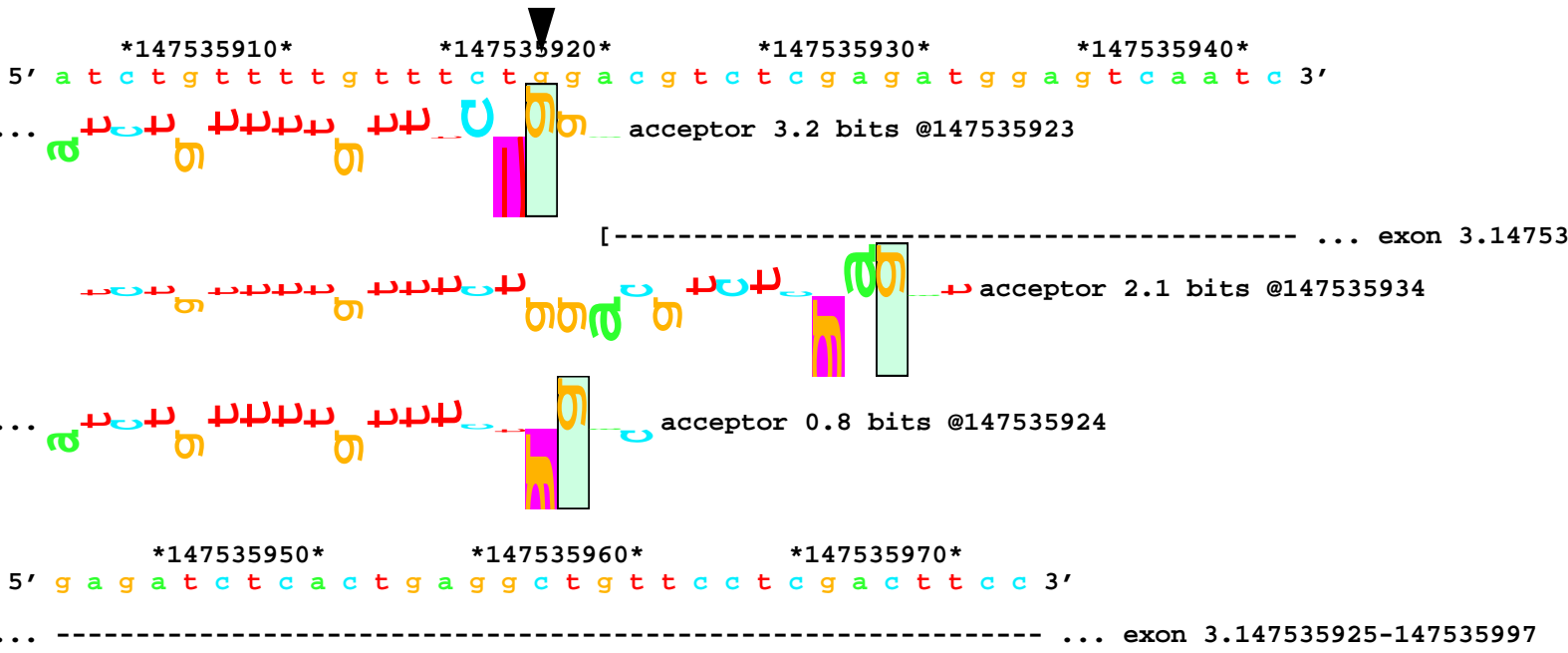
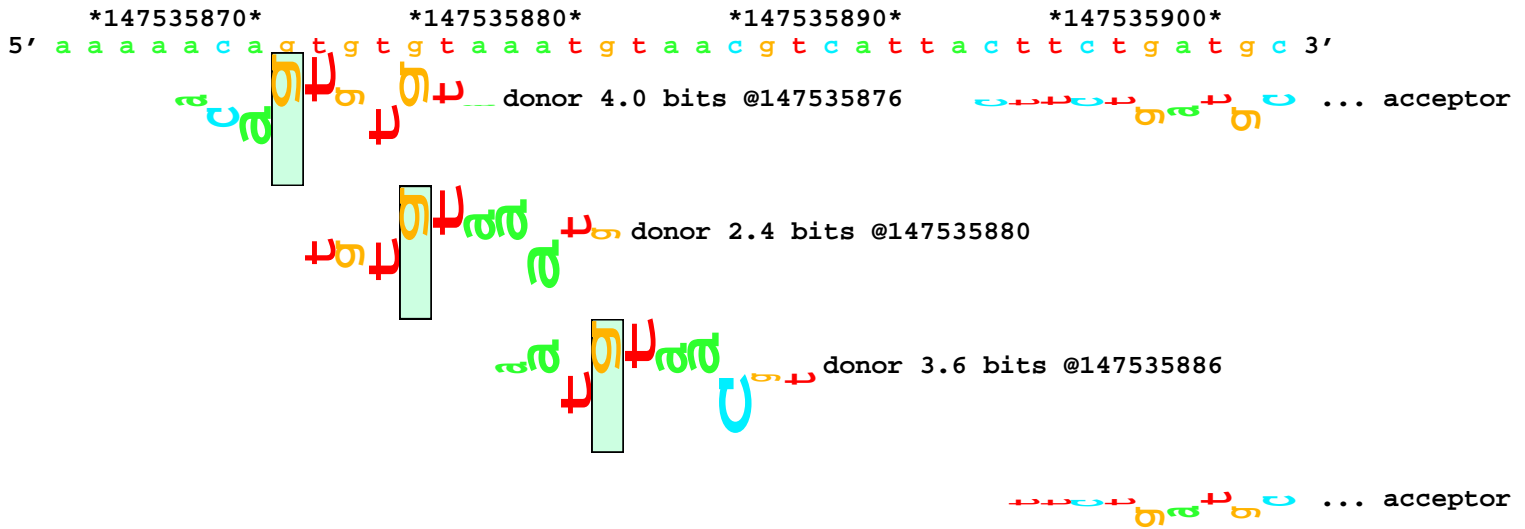
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 47, 1_47, piece 1, config: linear, direction: +, begin: 147535869, end: 147535977



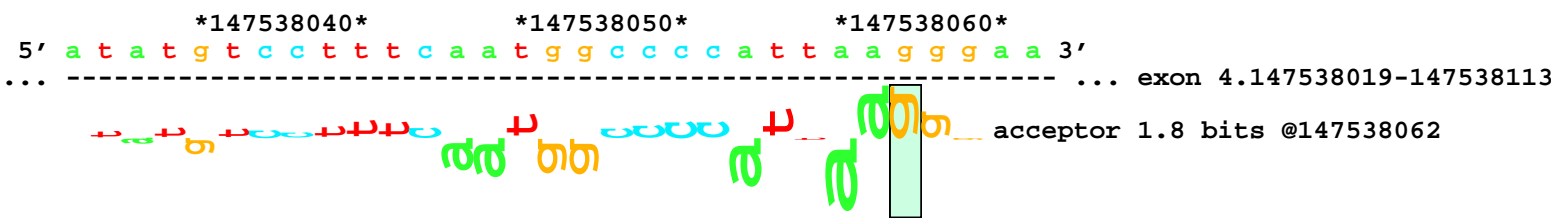
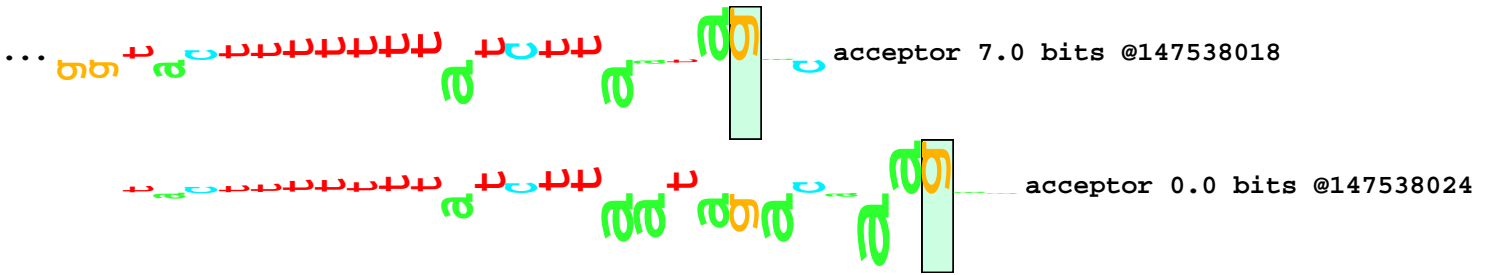
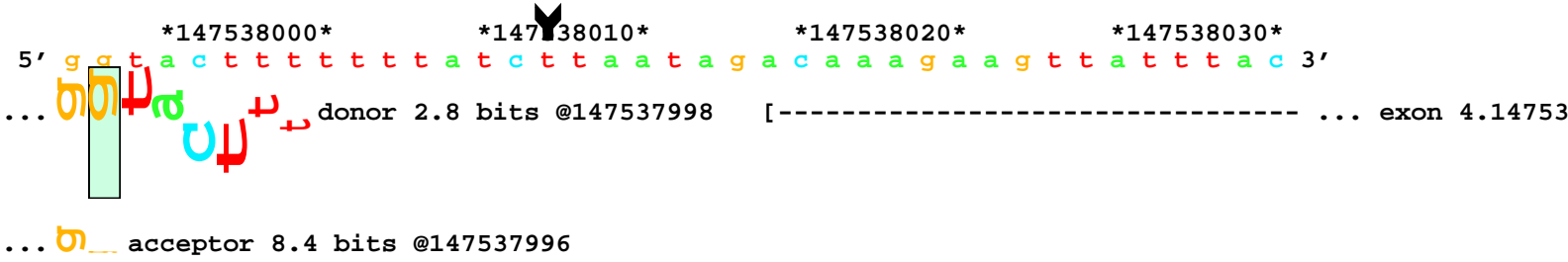
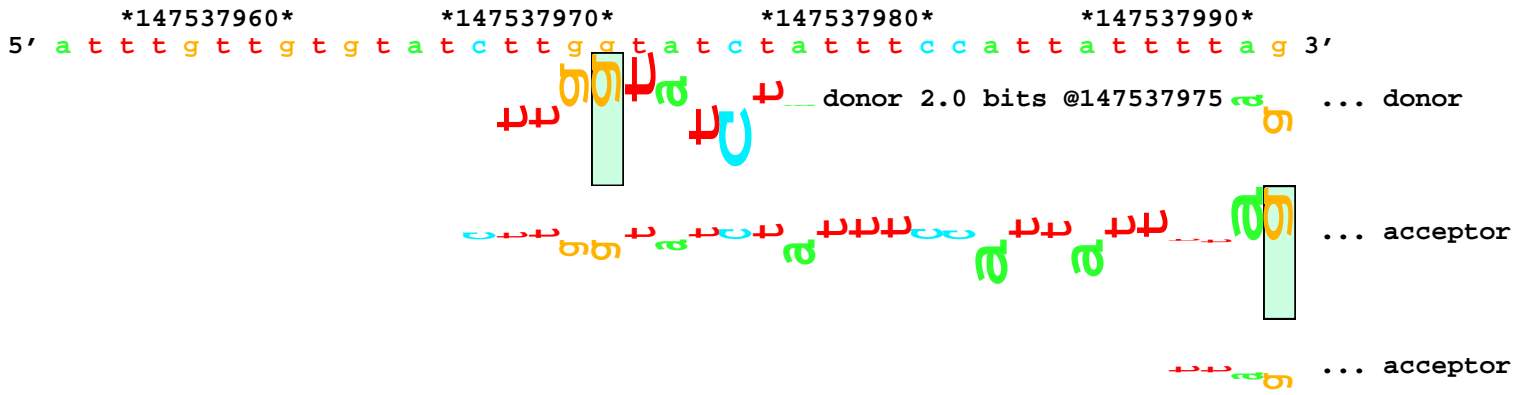
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 48, 1_48, c.64-2A>G a147535923g, config: linear, direction: +, begin: 147535869, end: 147535997



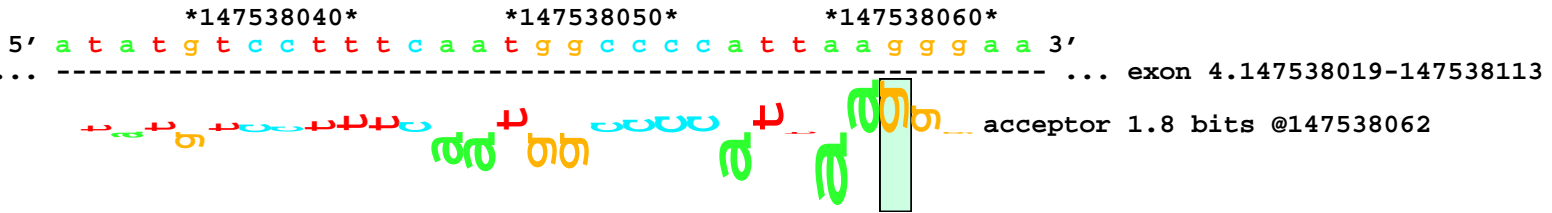
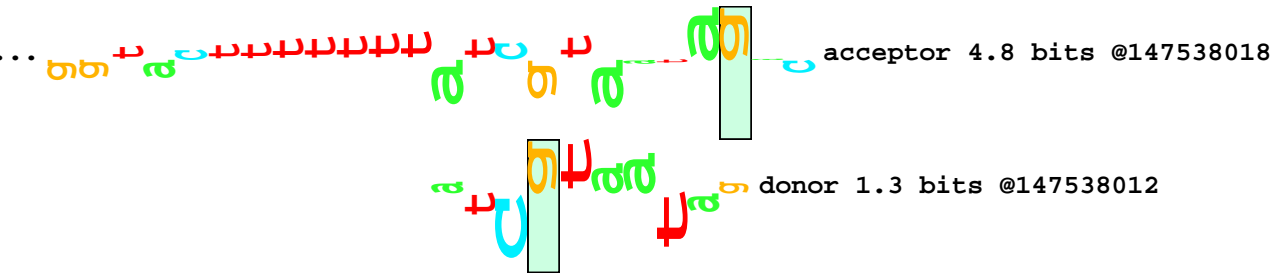
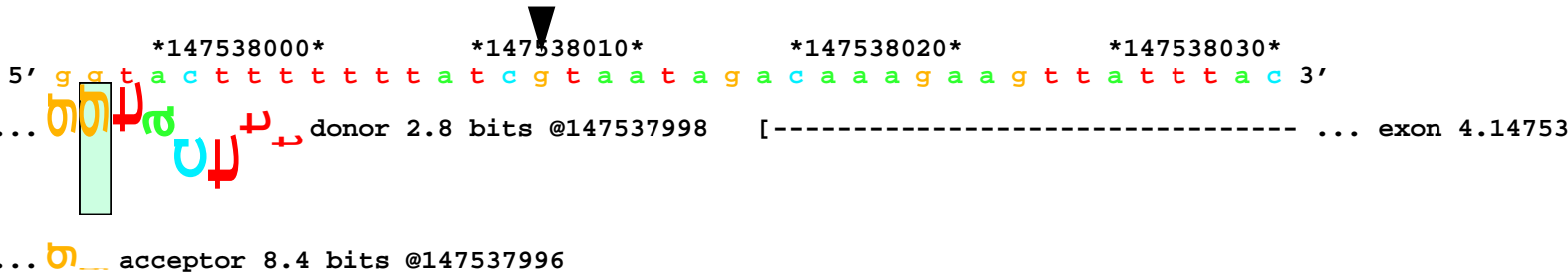
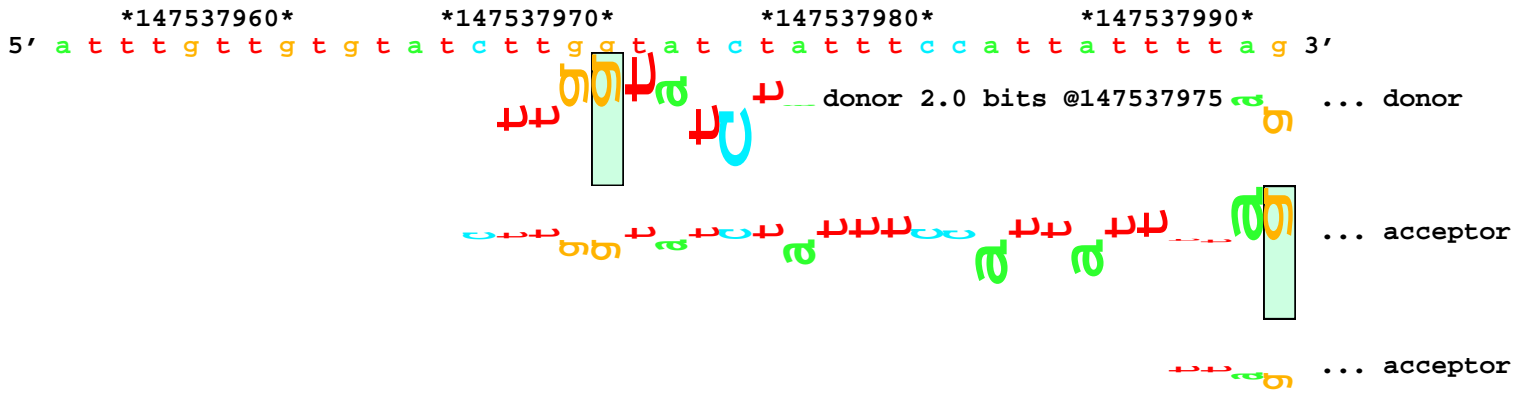
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 49, 1_49, piece 1, config: linear, direction: +, begin: 147537958, end: 147538066



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 50, 1_50, c.137-7T>G t147538012g, config: linear, direction: +, begin: 147537958, end: 147538113



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 51, 1_51, piece 1, config: linear, direction: +, begin: 147553968, end: 147554076

147553970 *147553980* *147553990* *147554000*

5' t t g a t g t t t t a a t t a t a c t g a c a g a a a t a c t g a c t a c t g 3'

... acceptor

147554010 *147554020* *147554030* *147554040*

5' t a t t t t t g t c c a t t a c a a g a t t c t t c t c t a a t a c t t g a t 3'

... acceptor 11.4 bits @147554024

[----- ... exon 5.14755

... acceptor

... acceptor

147554050 *147554060* *147554070*

5' g t t c c t c t g g g t g t g a t c t c g a g a a t t g a a a 3'

... donor 3.2 bits @147554056

----- ... exon 5.147554025-147554135

... acceptor 0.9 bits @147554054

... acceptor 0.8 bits @147554055

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 52, 1_52, c232-3C>A c147554022a, config: linear, direction: +, begin: 147553968, end: 147554

147553970 *147553980* *147553990* *147554000*

5' t t g a t g t t t t a a t t a t a c t g a c a g a a a t a c t g a c t a c t g 3'

... acceptor

147554010 *147554020* *147554030* *147554040*

5' t a t t t t t t g t c c a t t a a a a g g a t t c t t c t c t a a t a c t t g a t 3'

... acceptor 7.2 bits @147554024

[----- ... exon 5.14755

... acceptor

... acceptor

147554050 *147554060* *147554070*

5' g t t c c t c t g g g t g t g a t c t c g a g a a t t g a a a 3'

... donor 3.2 bits @147554056

... ----- ... exon 5.147554025-147554135

... acceptor 0.9 bits @147554054

... acceptor 0.8 bits @147554055

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 53, 1_53, piece 1, config: linear, direction: +, begin: 147553969, end: 147554077

147553970 *147553980* *147553990* *147554000*

5' t g a t g t t t t a a t t a t a c t g a c a g a a a t a c t g a c t a c t g t 3'

... acceptor

147554010 *147554020* *147554030* *147554040*

5' a t t t t t g t c c a t t a c a c g a t t c t t c t c t a a t a c t t g a t g 3'

... acceptor 11.4 bits @147554024

[----- ... exon 5.14755

... acceptor

... acceptor

147554050 *147554060* *147554070*

5' t t c c t c t g g g t g t g a t c t c g a g a a t t g a a a a 3'

... donor 3.2 bits @147554056

----- ... exon 5.147554025-147554135

... acceptor 0.9 bits @147554054

... acceptor 0.8 bits @147554055

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 54, 1_54, c.232-2A>C a147554023c, config: linear, direction: +, begin: 147553969, end: 14755

147553970 *147553980* *147553990* *147554000*
5' t g a t g t t t t a a t t a t a c t g a c a g a a a t a c t g a c t a c t g t 3'



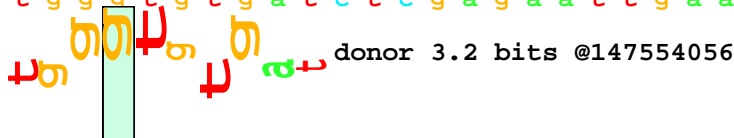
147554010 *147554020* *147554030* *147554040*
5' a t t t t t t g t c c a t t a c c g g a t t c t t c t c t a a t a c t t g a t g 3'



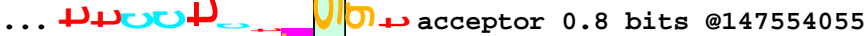
----- ... exon 5.14755



147554050 *147554060* *147554070*
5' t t c c t c t g g g t t g t g a t c t c g a g a a t t g a a a a 3'



----- ... exon 5.147554025-147554135



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

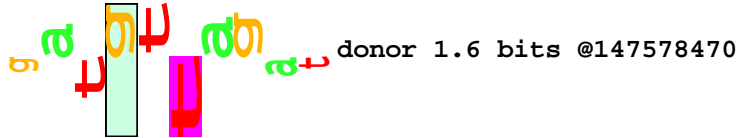
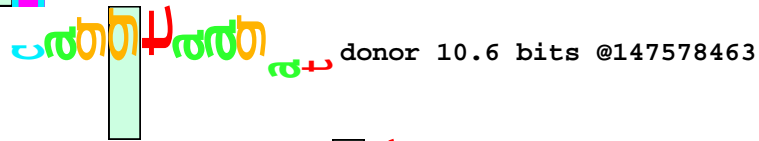
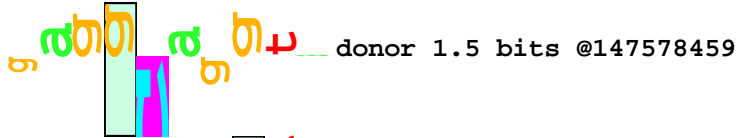
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 55, 1_55, piece 1, config: linear, direction: +, begin: 147578409, end: 147578517

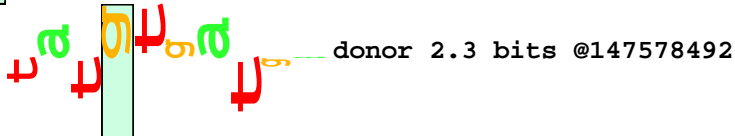
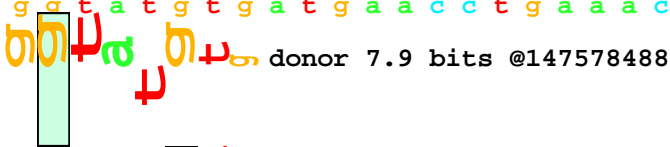
147578410 *147578420* *147578430* *147578440*
5' t t t a a c g t g g a t g g a t g g a c a g t t t a c a a t c c a g t g g a a 3'
... -----> exon 7.147578379-147578462



147578450 *147578460* *147578470* *147578480*
5' g a a t a c a g g a g g c a g g t a a g a t g t t a g a t g c t a t t g t c t 3'
... -----> exon 7.147578379-147578462 ... donor



147578490 *147578500* *147578510*
5' g a t a t g t g a t g a a c c t g a a a c a t g c a t t a t g 3'
... -----> exon 7.147578379-147578462 ... donor



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

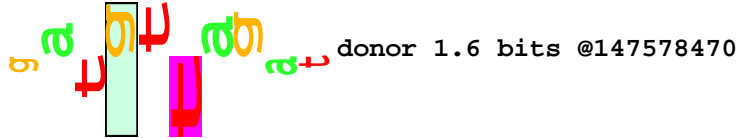
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 56, 1_56, c.528+1G>A g147578463a, config: linear, direction: +, begin: 147578409, end: 147578463

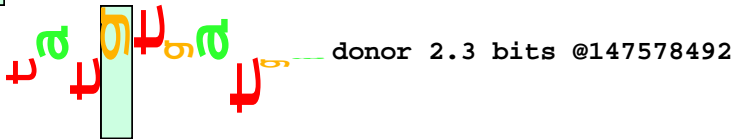
147578410 *147578420* *147578430* *147578440*
5' t t t a a c g t g g a t g g a t g g a c a g t t t a c a a t c c a g t g g a a 3'
... -----> exon 7.147578379-147578462



147578450 *147578460* *147578470* *147578480*
5' g a a t a c a g g a g g c a g a t a a g a t g t t a g a t g c t a t t g t c t 3'
... -----> exon 7.147578379-147578462 ... donor



147578490 *147578500* *147578510*
5' g g t a t g t g a t g a a c c t g a a a c a t g c a t t a t g 3'
... -----> donor 7.9 bits @147578488



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 57, 1_57, piece 1, config: linear, direction: +, begin: 147599036, end: 147599144

5' g t t a t a t g c t t t c t c a g t t t t g t a c c c a t t a a t t a a a a c 3'

... acceptor

5' a a a t t a t c t t c a t c a a t t t a t t c a c c g a a t a g g g t c a t g g 3'

... acceptor 4.8 bits @147599099

... exon 12.1475

donor 1.6 bits @1

... donor

... acceptor 2.7 bits @14759910

5' t g a t a a a a a c c a c a c c g a t g c t g a c c g t t c t 3'

... exon 12.147599100-147599192

... donor 4.5 bits @147599113

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

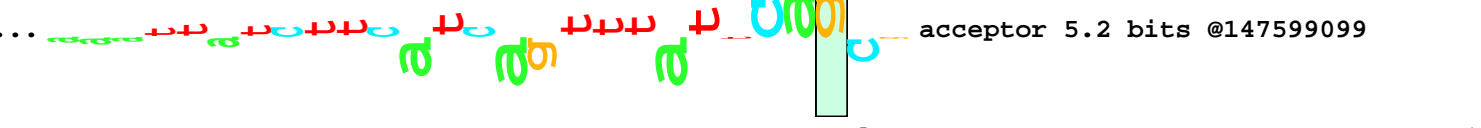
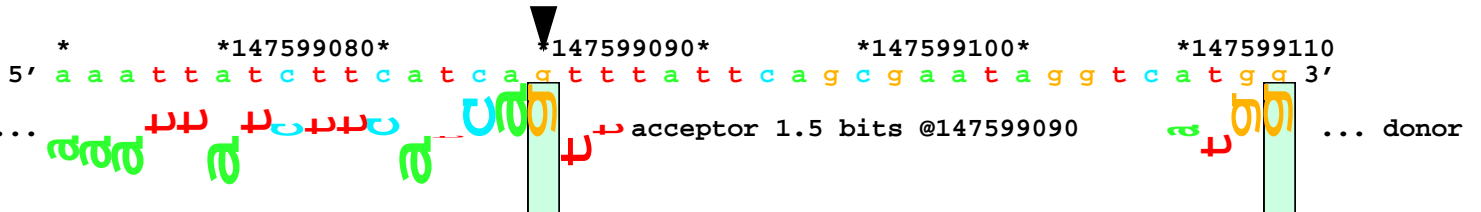
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

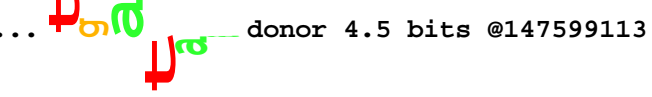
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 58, 1_58, c.1261-10A>G a147599090g, config: linear, direction: +, begin: 147599036, end: 147599192

147599040 *147599050* *147599060* *147599070
5' g t t a t a t g c t t t c t c a g t t t t g t a c c c a t t a a t t a a a a c 3'



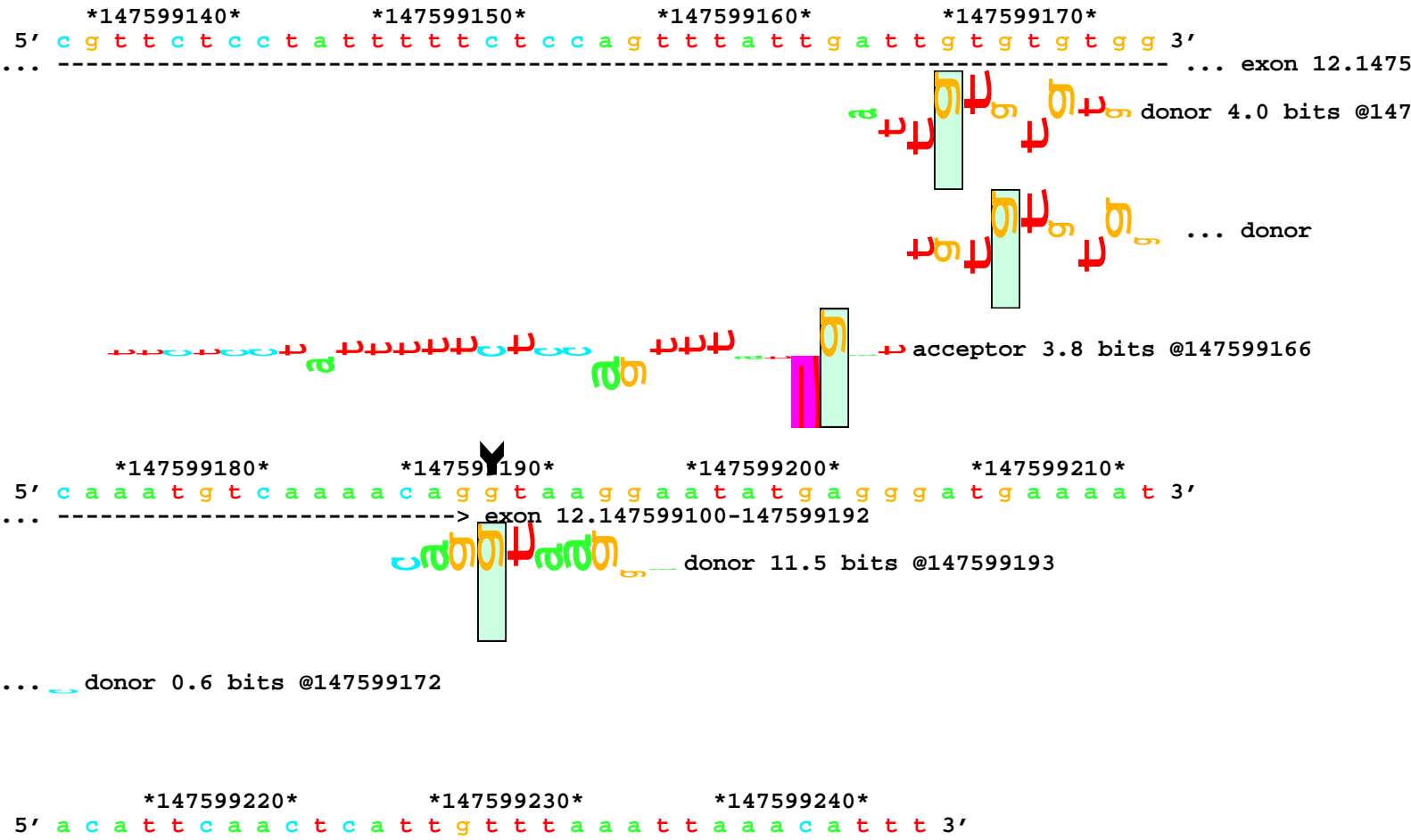
* *147599120* *147599130* *147599140
5' t g a t a a a a a c c a c a c c g a t g c t g a c c g t t c t 3'



----- ... exon 12.147599100-147599192

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

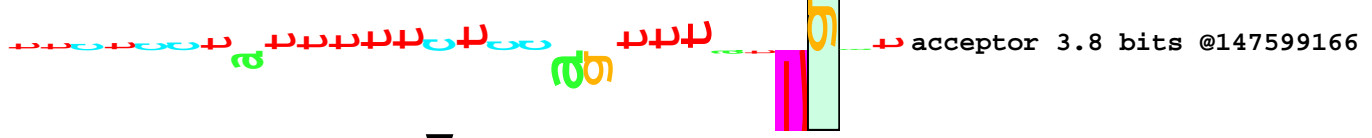
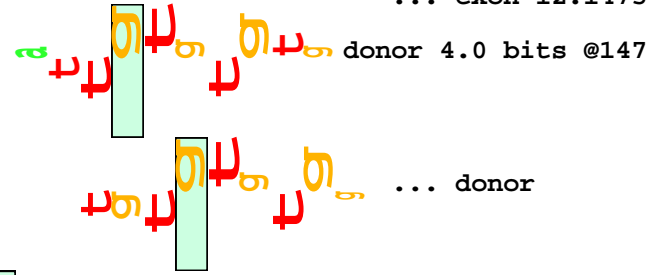
piece 59, 1_59, piece 1, config: linear, direction: +, begin: 147599139, end: 147599247



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 60, 1_60, c.1353+1G>A g147599193a, config: linear, direction: +, begin: 147599139, end: 1475

147599140 *147599150* *147599160* *147599170*
 5' c g t t c t c c t a t t t t t c t c c a g t t t a t t g a t t g t g t g t g g 3'
 ... -----> exon 12.1475



147599180 *147599190* *147599200* *147599210*
 5' c a a a t g t c a a a a c a g a t a a g g a a t a t g a g g g a t g a a a a t 3'
 ... -----> exon 12.147599100-147599192

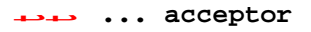
... _ donor 0.6 bits @147599172

147599220 *147599230* *147599240*
 5' a c a t t c a a c t c a t t g t t t a a a t t a a a c a t t t 3'

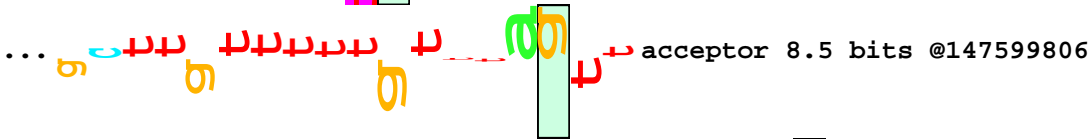
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 61, 1_61, piece 1, config: linear, direction: +, begin: 147599752, end: 147599860

* *147599760* *147599770* *147599780* *147599790
5' t t t t a t a a a g t t t c a g t c c c a g t t t t t c a t g c t t t g t t t 3'



* *147599800* *147599810* *147599820*
5' g c t t g t t t t t t t t t a g t t c c c t a c a g c t t t t g a a t t c a a 3'



[----- ... exon 13.1475

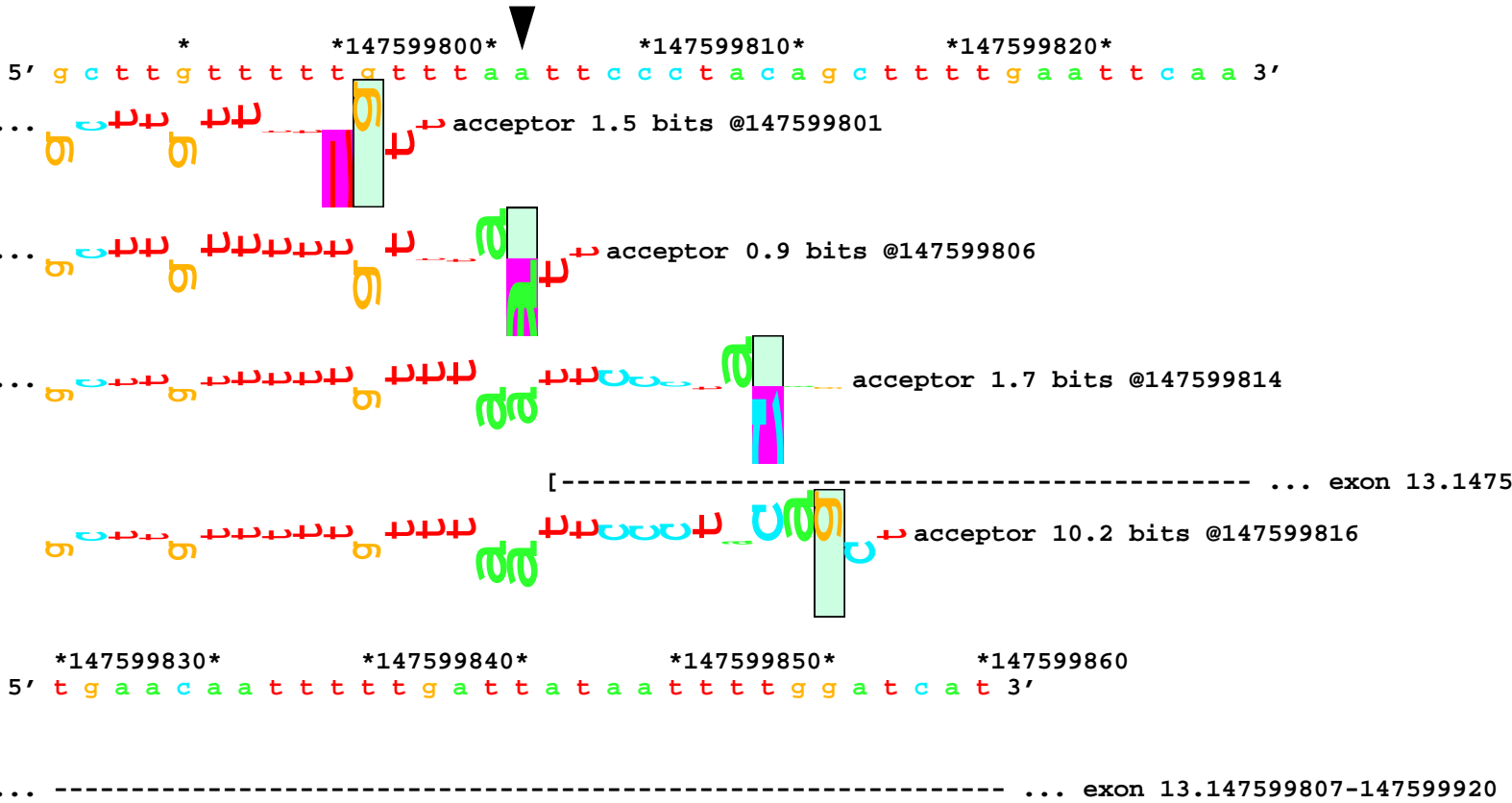
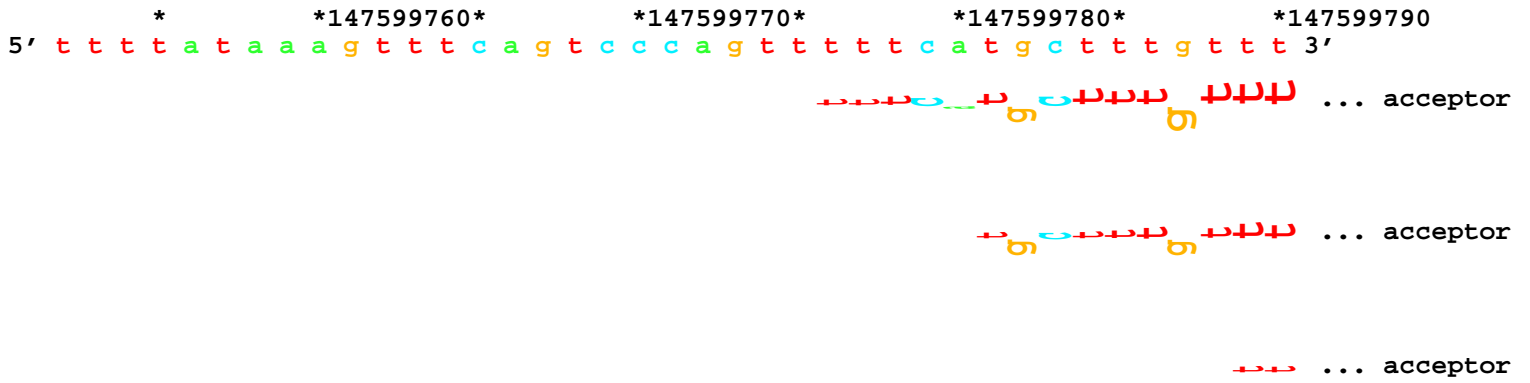


147599830 *147599840* *147599850* *147599860
5' t g a a c a a t t t t t g a t t a t a a t t t t g g a t c a t 3'

... ----- ... exon 13.147599807-147599920

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

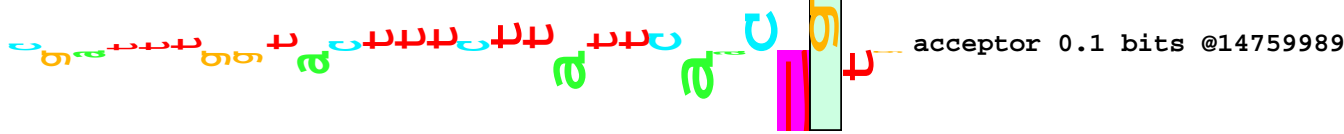
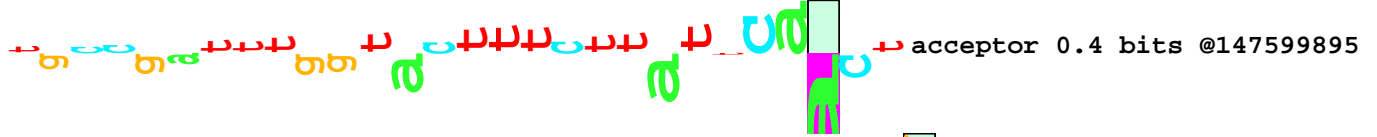
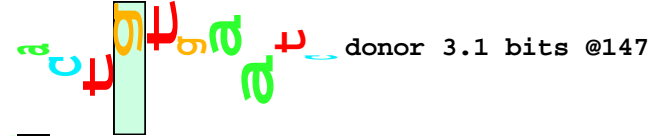
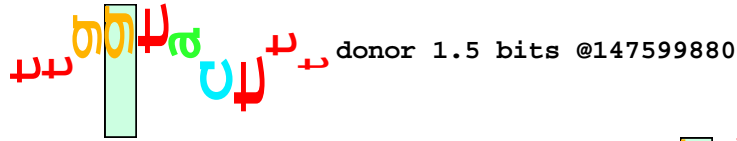
piece 62, 1_62, c.1354-1G>A g147599806a, config: linear, direction: +, begin: 147599752, end: 1475



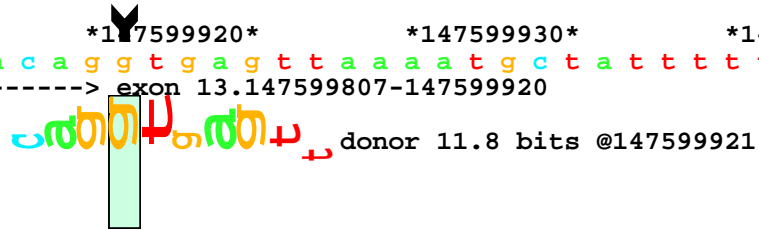
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 63, 1_63, piece 1, config: linear, direction: +, begin: 147599867, end: 147599975

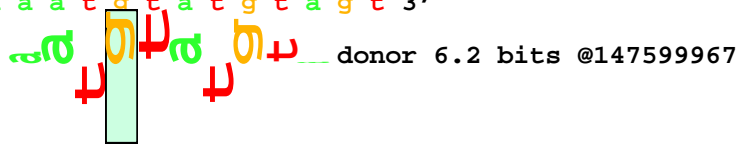
5' ***147599870*** a g t t g c c g a t t t g g t a c t t t c t t a t t c a a c t g t g a a t c t 3' ***147599880*** ***147599890*** ***147599900*** ... exon 13.1475



5' ***147599910*** g c t c g a g a a a g a c a g g t g a g t t a a a a t g c t a t t t t t t t t t 3' ***147599920*** ***147599930*** ***147599940*** ... exon 13.147599807-147599920



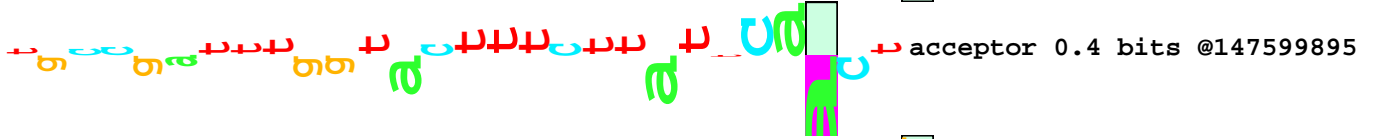
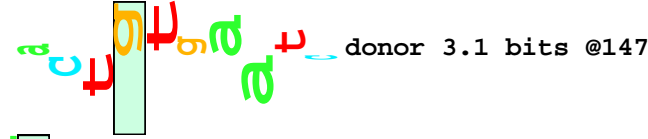
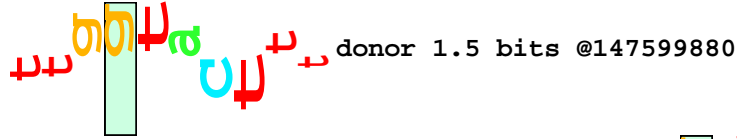
5' * ***147599950*** g a t a c a t t a g g g c t t g c c a a a a t c t a t g t a g t 3' ***147599960*** ***147599970***



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 64, 1_64, c.1467+1G>A g147599921a, config: linear, direction: +, begin: 147599867, end: 1475

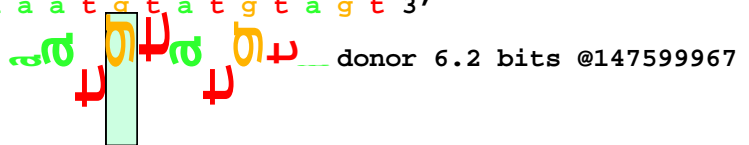
5' ***147599870*** a g t t g c c g a t t t g g t a c t t t c t t a t t c a a c t g t g a a t c t 3' ***147599880*** ***147599890*** ***147599900***
... -----> exon 13.1475



5' ***147599910*** g c t c g a g a a a g a c a g a t g a g t t a a a a t g c t a t t t t t t t t t 3' ***147599920*** ***147599930*** ***147599940***
... -----> exon 13.147599807-147599920



5' * ***147599950*** g a t a c a t t a g g c t t g c c a a a a t g t a t g t a g t 3' ***147599960*** ***147599970***



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 65, 1_65, piece 1, config: linear, direction: +, begin: 147535913, end: 147536021

* 147535920* 147535930* 147535940* 147535950

5' t t t t g t t t c t a g a c g t c t c g a g a t g g a g t c a a t c g a g a t 3'

[----- ... exon 3.14753

* 147535960* 147535970* 147535980* 147535990

5' c t c a c t g a g g c t g t t c c t c g a c t t c c a g g a g a a a c a c t a 3'

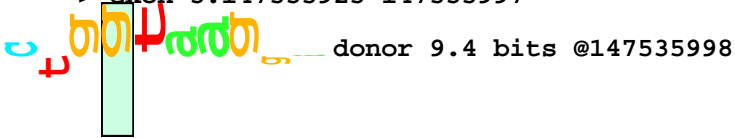
... ----- ... exon 3.14753



* 147536000* 147536010* 147536020

5' a t c a c t g g t a a g g a c c t g c t g a c a t a a g a t t 3'

... -----> exon 3.147535925-147535997



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

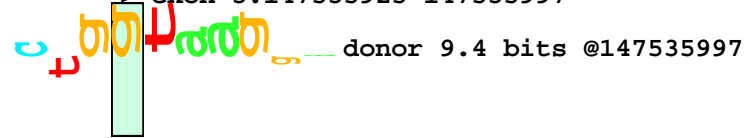
piece 66, 1_66, c.106delC d147535967,147535967, config: linear, direction: +, begin: 147535913, end: 147535997

* 147535920* 147535930* 147535940* 147535950
 5' t t t t g t t t c t a g a c g t c t c g a g a t g g a g t c a a t c g a g a t 3'
 [-----] ... exon 3.147535925-147535967

* 147535960* 147535970* 147535980* 147535990
 5' c t c a c t g a g g c t g t t c t c g a c t t c c a g g a g a a a c a c t a a 3'
 ... -----] ... exon 3.147535967-147535997

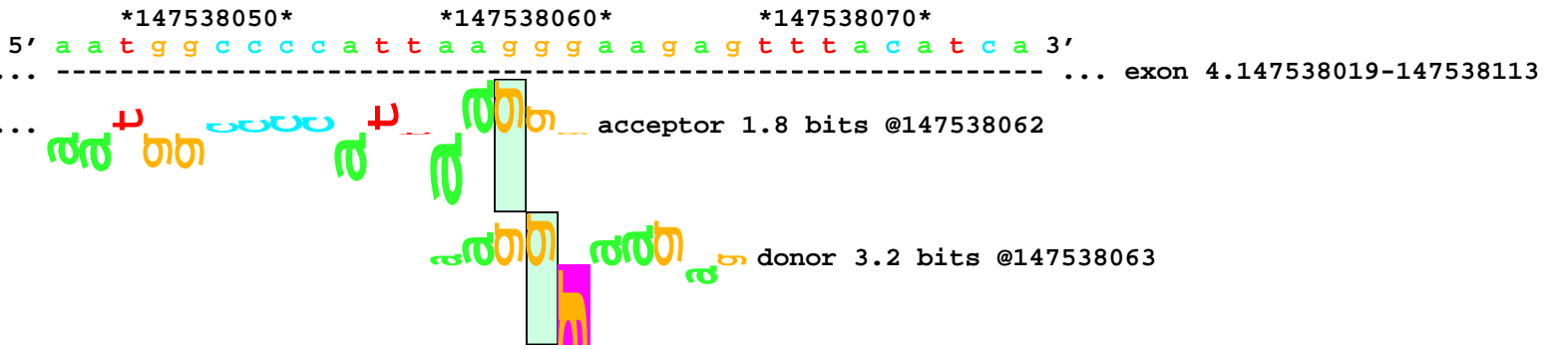
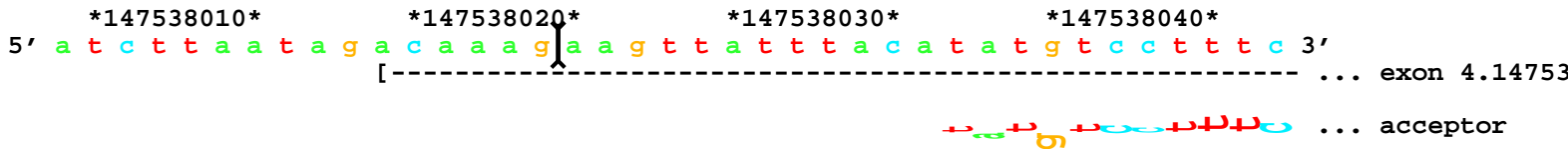
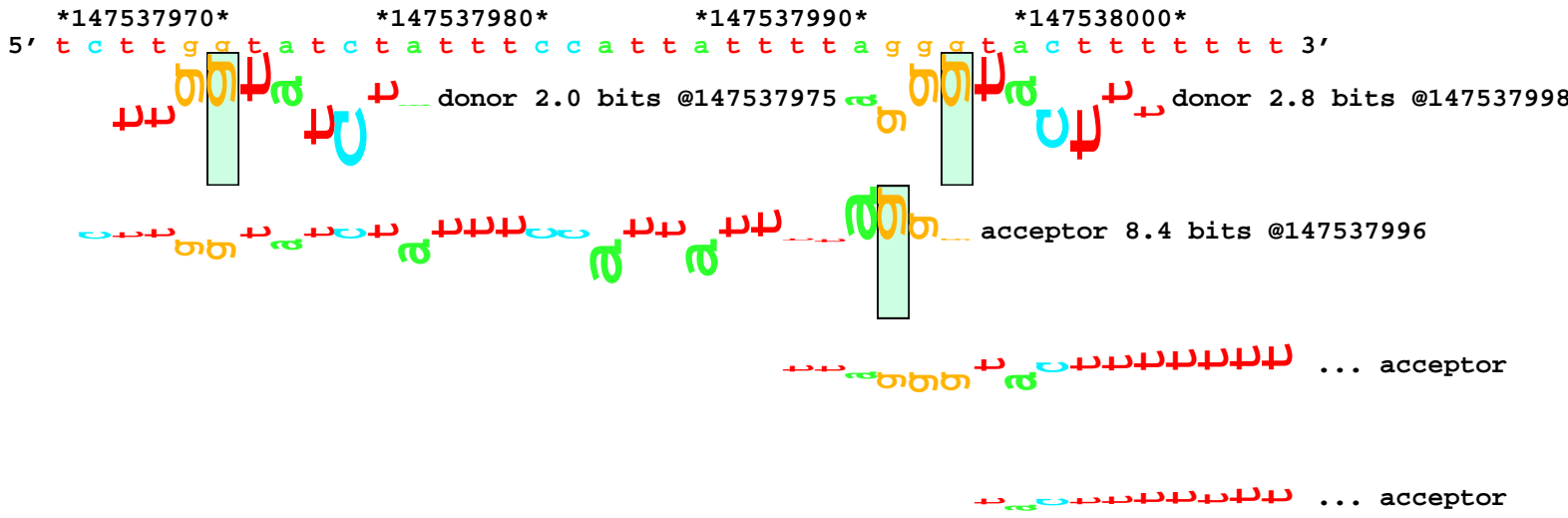


* 147536000* 147536010* 147536020
 5' t c a c t g g t a a g g a c c t g c t g a c a t a a g a t t 3'
 ... -----] exon 3.147535925-147535997

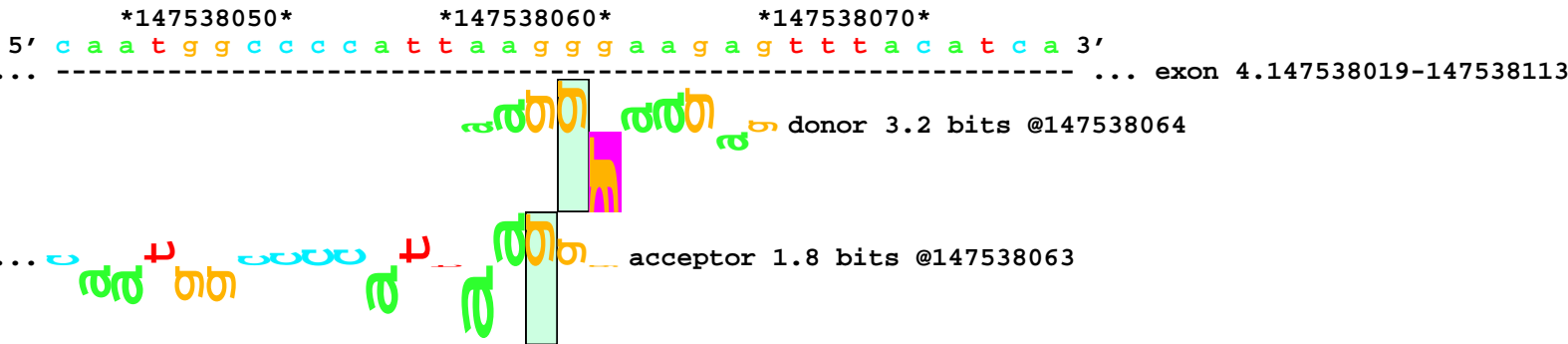
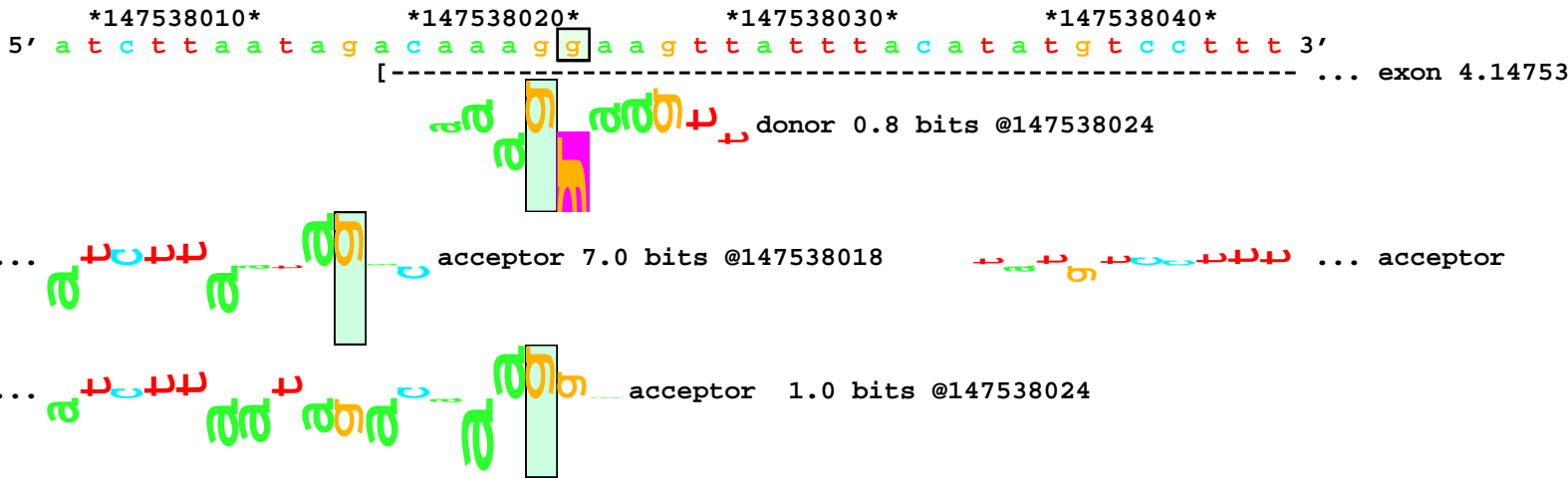
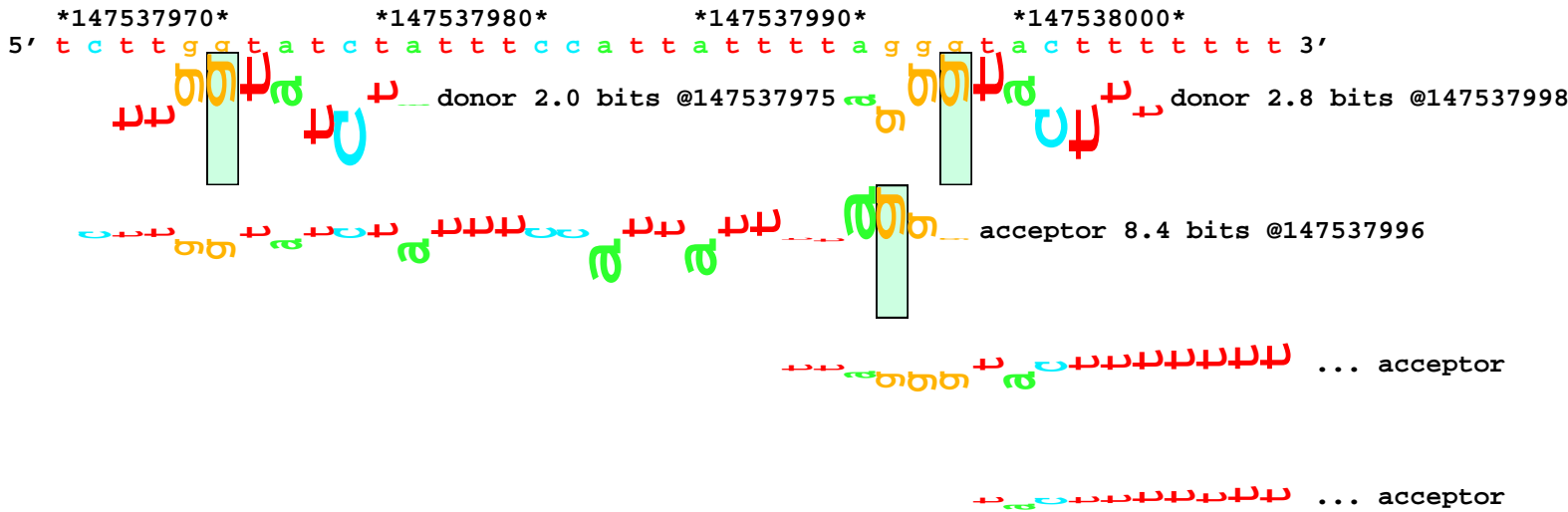


Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 67, 1_67, piece 1, config: linear, direction: +, begin: 147537970, end: 147538078

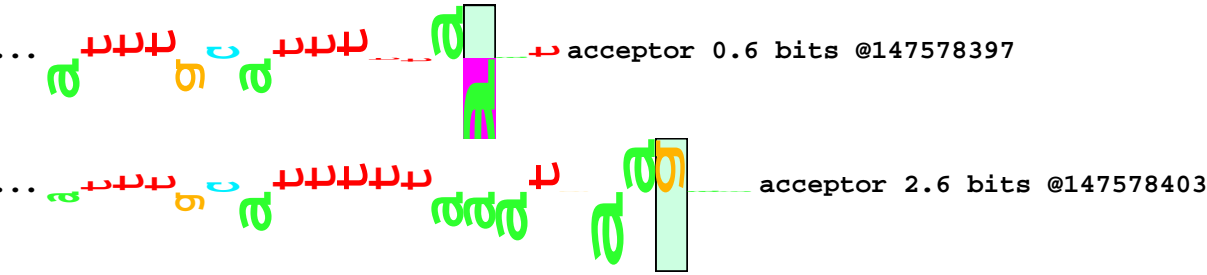
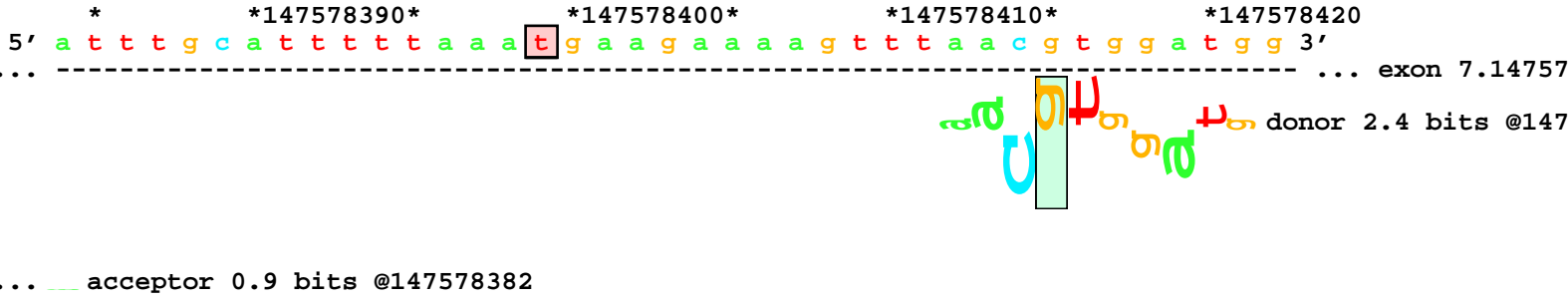
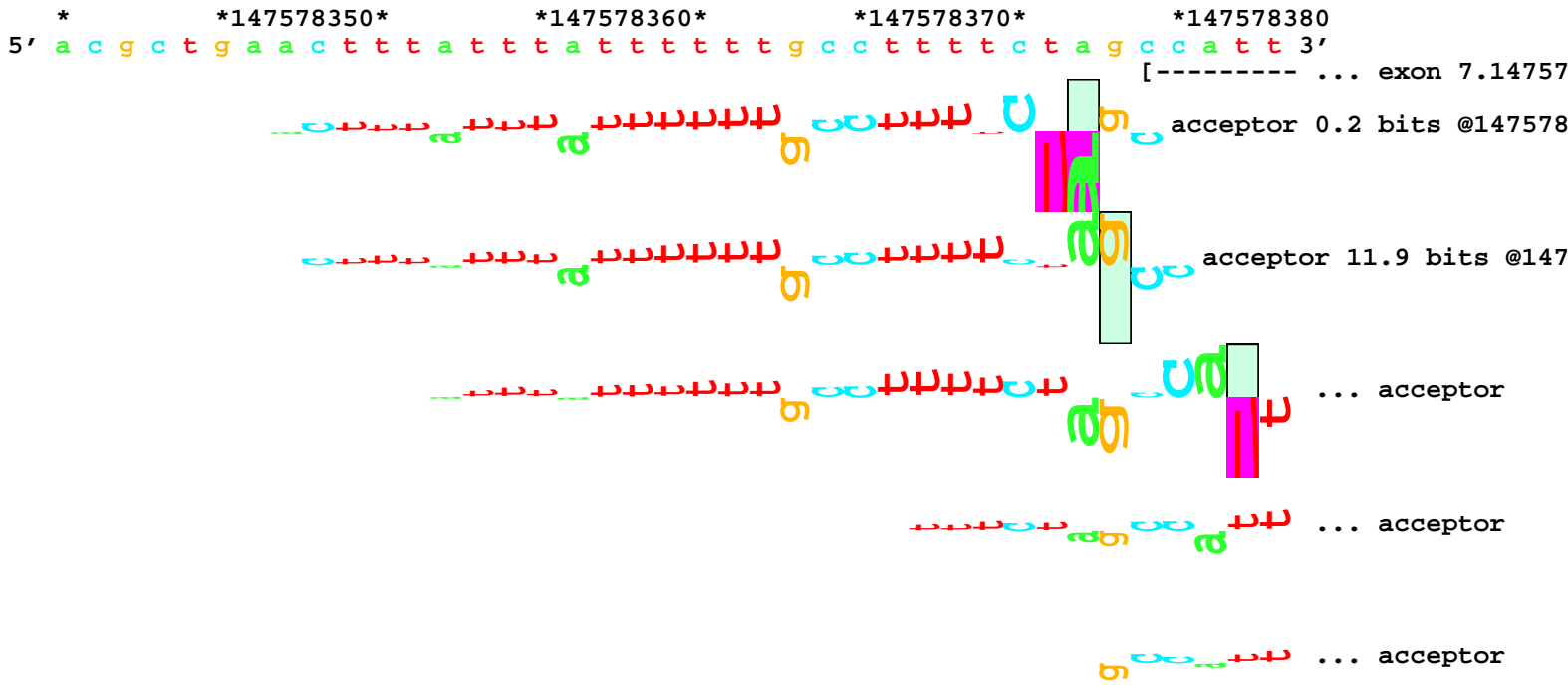


piece 68, 1_68, c.141-142insG i147538024,147538025g, config: linear, direction: +, begin: 14753797



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 69, 1_69, piece 1, config: linear, direction: +, begin: 147578345, end: 147578453



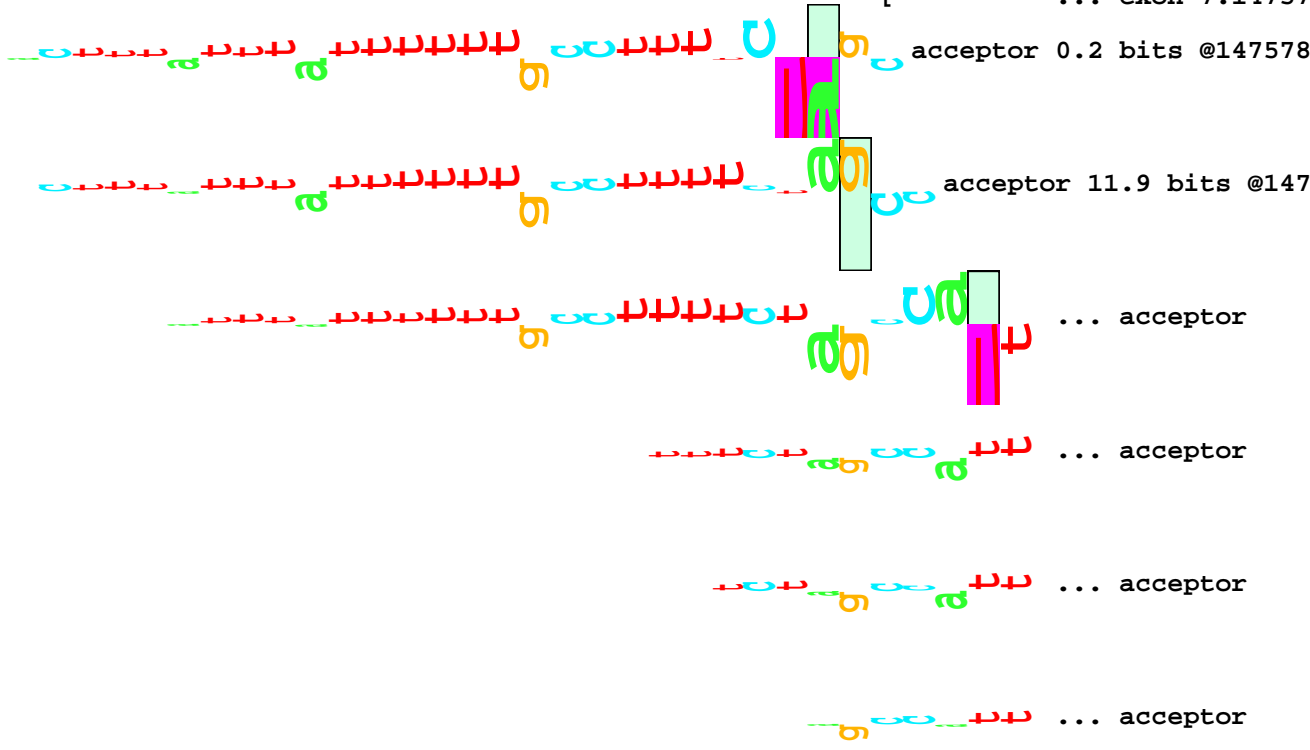
147578430 *147578440* *147578450

5' a t g g a c a g t t t a c a a t c c a g t g g a a g a a t a c 3'

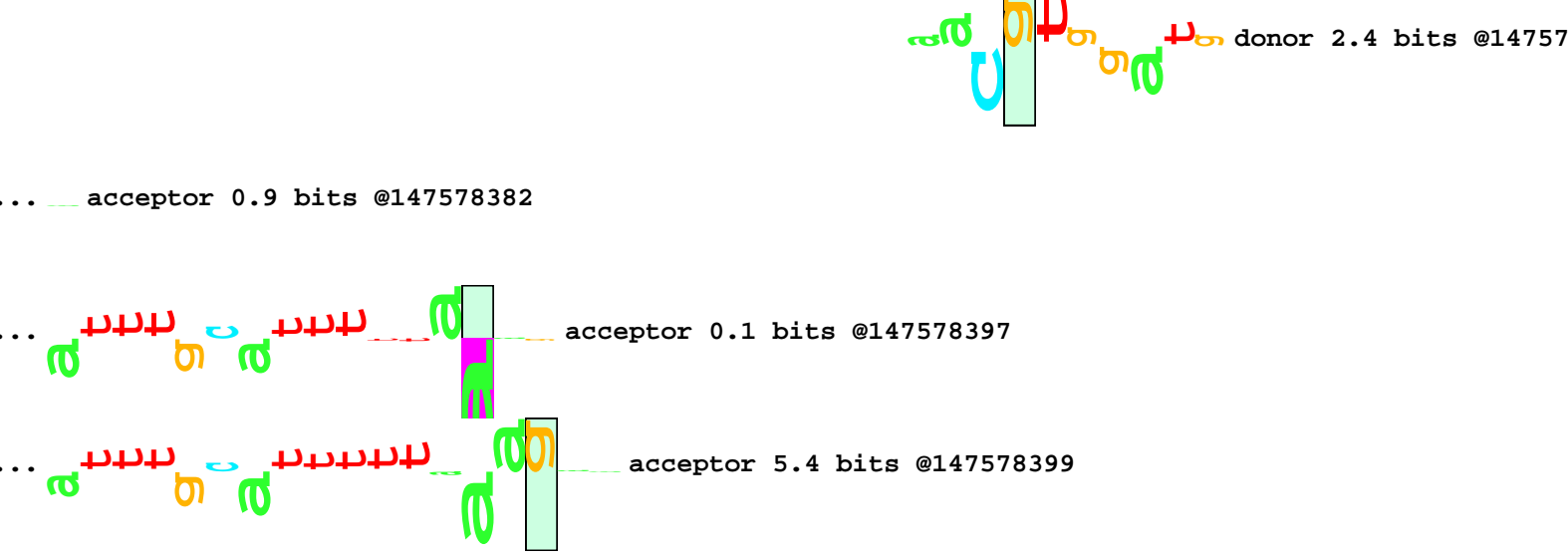
... ----- ... exon 7.147578379-147578462

piece 70, 1_70, c.465delT d147578399,147578399, config: linear, direction: +, begin: 147578345, end: 147578420

* 147578350* 147578360* 147578370* 147578380
5' a c g c t g a a c t t t a t t t a t t t t t t g c c t t t t c t a g c c a t t 3' [----- ... exon 7.147578345-147578399]

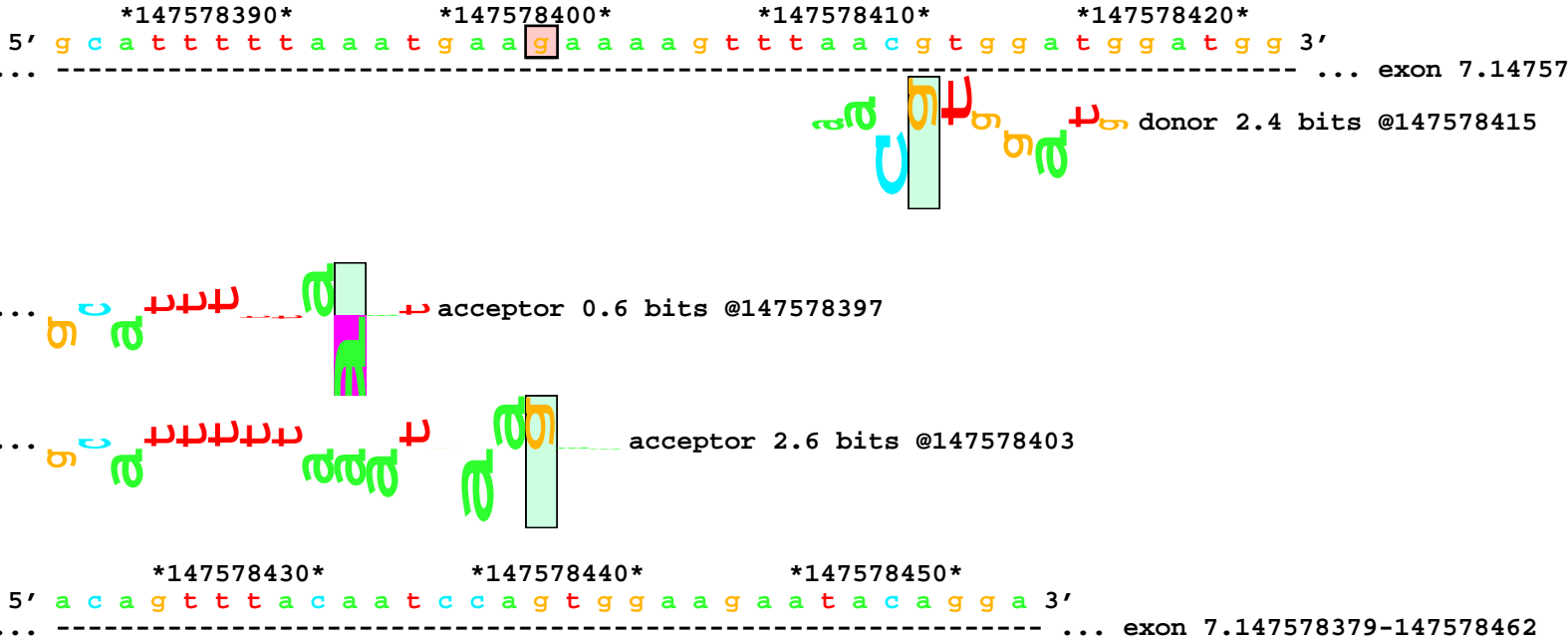
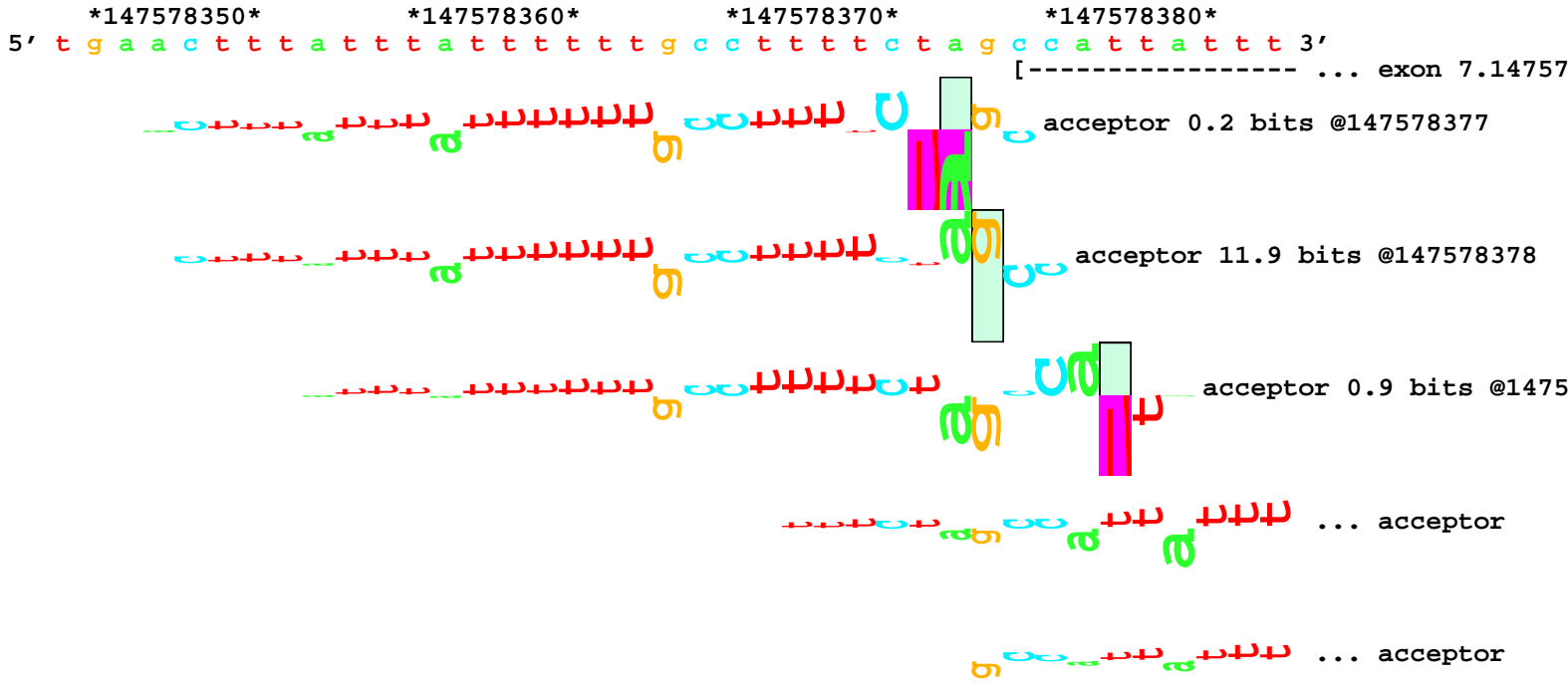


* 147578390* 147578400* 147578410* 147578420
5' a t t t t g c a t t t t t t a a a g g a a g a a a a g t t t a a c g t g g a t g g a 3' ... exon 7.147578399-147578420



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 71, 1_71, piece 1, config: linear, direction: +, begin: 147578349, end: 147578457



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 72, 1_72, c.469delG d147578403,147578403, config: linear, direction: +, begin: 147578349, end:

147578350 *147578360* *147578370* *147578380*
5' t g a a c t t t a t t t a t t t t t t g c c t t t t c t a g c c a t t a t t t 3'
[----- exon 7.14757



147578390 *147578400* *147578410* *147578420*
5' g c a t t t t t a a a t g a a a a a a g t t t a a c g t g g a t g g a t g g a 3'
... ----- exon 7.14757



147578430 *147578440* *147578450*
5' c a g t t t a c a a t c c a g t g g a a g a a t a c a g g a 3'
... ----- exon 7.147578379-147578462

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

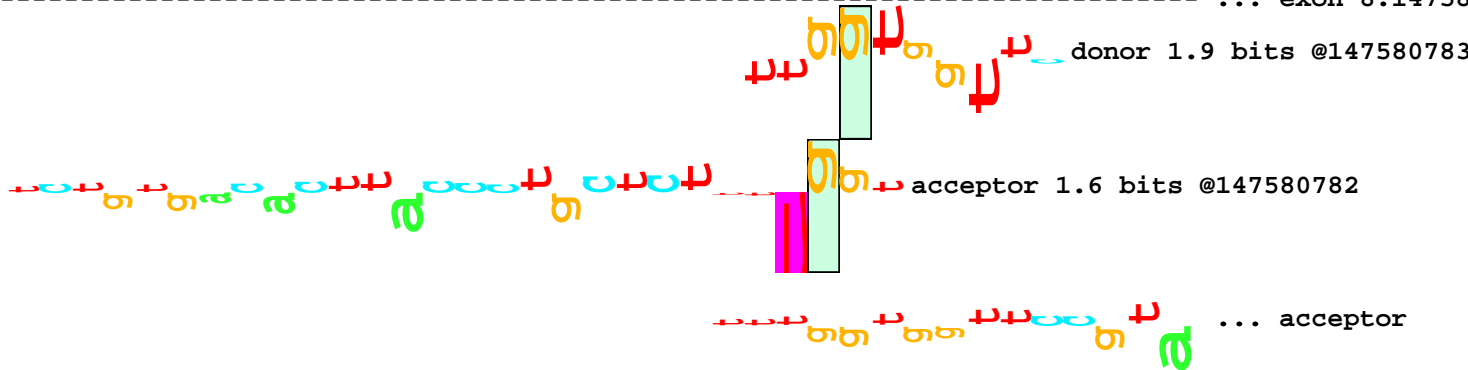
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

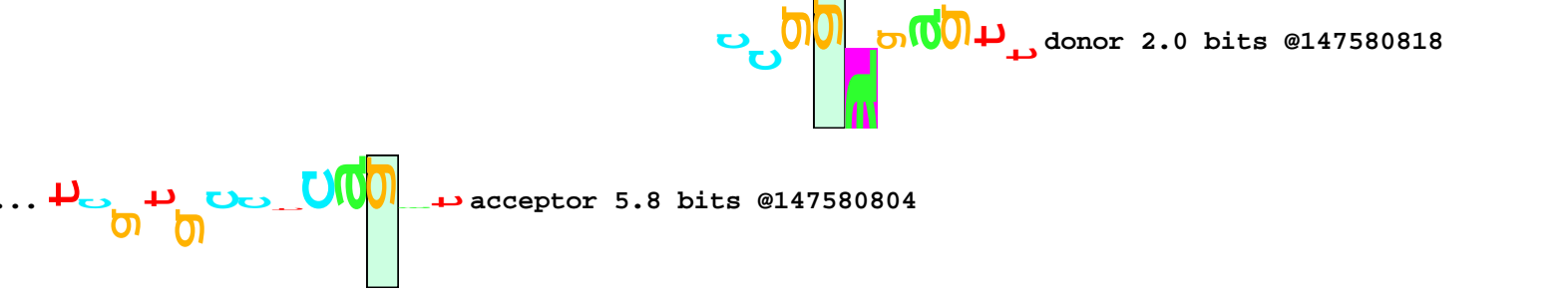
piece 73, 1_73, piece 1, config: linear, direction: +, begin: 147580716, end: 147580824

147580720 *147580730* *147580740* *147580750
 5' t c a c c a t t g g a g a a t a a c t t t t a t t a a t a a g t g c t a t g a 3'
 ... ----- ... exon 8.14758

* *147580760* *147580770* *147580780* *147580790
 5' g c t c t g t g a c a c t t a c c c t g c t c t t t t g g t g g t t c c g t a 3'
 ... ----- ... exon 8.14758



* *147580800* *147580810* *147580820
 5' t c g t g c c t c a g a t g a t g a c c t c c g g a g a g t t 3'
 ... ----- ... exon 8.147580705-147580854



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

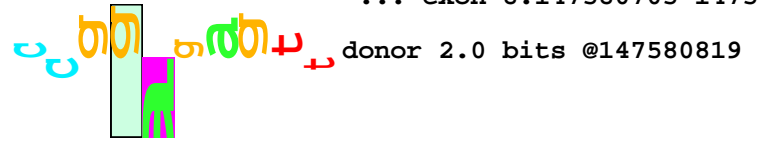
piece 74, 1_74, c.593-594insA i147580770,147580771a, config: linear, direction: +, begin: 14758071

5' t c a c c a t t g g a g a a t a a c t t t t a t t a a t a a g t g c t a t g a 3' ... exon 8.14758

5' g c t c t g t g a c a c t t a c a c c t g c t c t t t t g g t g g t t c c g t 3' ... exon 8.14758



5' a t c g t g c c t c a g a t g a t g a c c t c c g g a g a g t t 3' ... exon 8.147580705-147580854



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 75, 1_75, piece 1, config: linear, direction: +, begin: 147531986, end: 147532094

5' t g c a t a c a a a t t c a g t t g a t a t t g a a t g t t g t g t t t c t t 3'

... donor

... acceptor

... acceptor

... acceptor

5' g g t a g a g t t t c c a g g a t g g c t t c t g c a t c a a c t t c t a a a 3'

donor 1.2 bits @147532026

... acceptor

acceptor 5.4 bits @147532029

acceptor 0.9 bits @147532031

acceptor 5.0 bits @147532038

... exon 2.14753

5' t a t a a t t c a c a c t c c t t g g a c a a t g a g t c t a 3'

acceptor 1.6 bits @147532084

... exon 2.147532030-147532102

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 76, 1_76, c.445-linsGAAA i147532040,147532041gaaa, config: linear, direction: +, begin: 1475

5' t g c a t a c a a a t t c a g t t g a t a t t g a a t g t t g t g t t t c t t 3'

... donor

... acceptor

... acceptor

... acceptor

5' g g t a g a g t t t c c a g g a g a a a t g g c t t c t g c a t c a a c t t c 3'

donor 1.2 bits @147532026

... acceptor

acceptor 5.4 bits @147532029

acceptor 0.9 bits @147532031

acceptor 5.0 bits @147532038

... exon 2.14753

5' t a a a t a t a a t t c a c a c t c c t t g g a g a a t g a g t c t a 3'

acceptor 1.6 bits @147532088

... exon 2.147532030-147

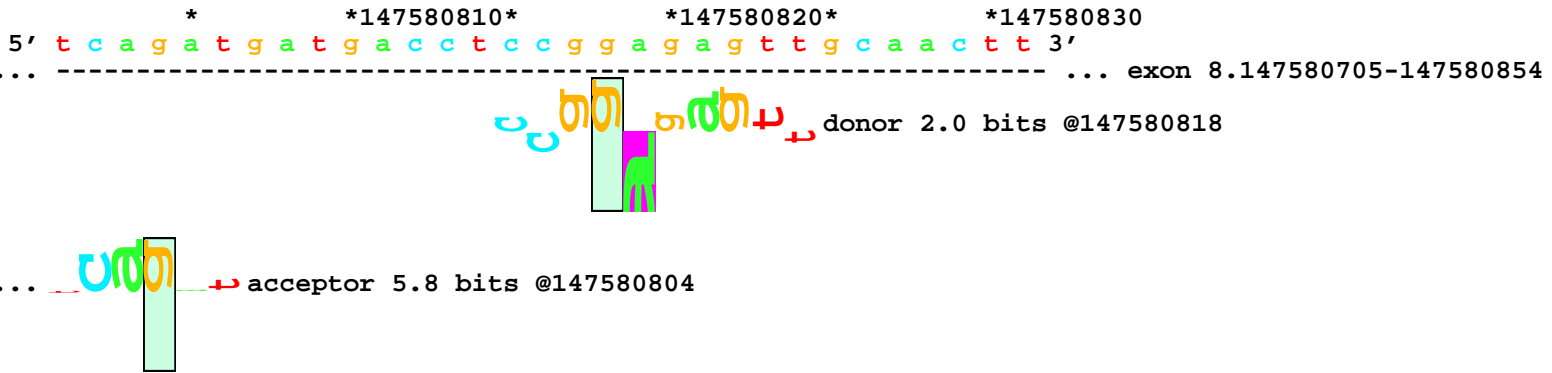
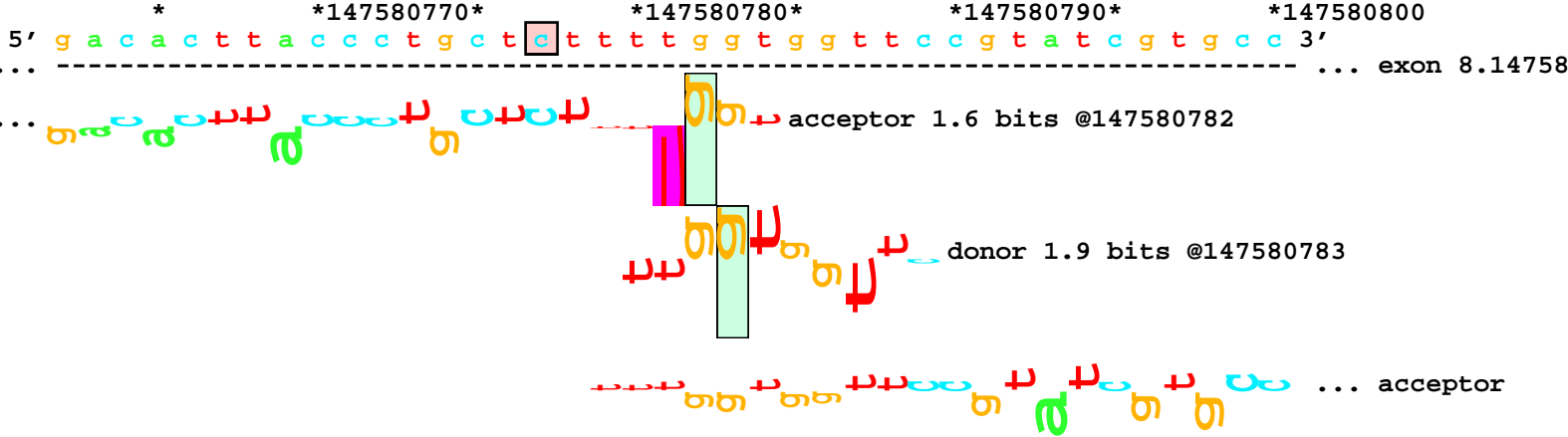
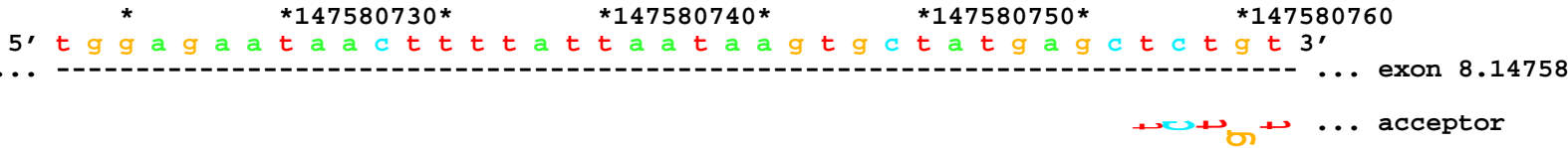
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

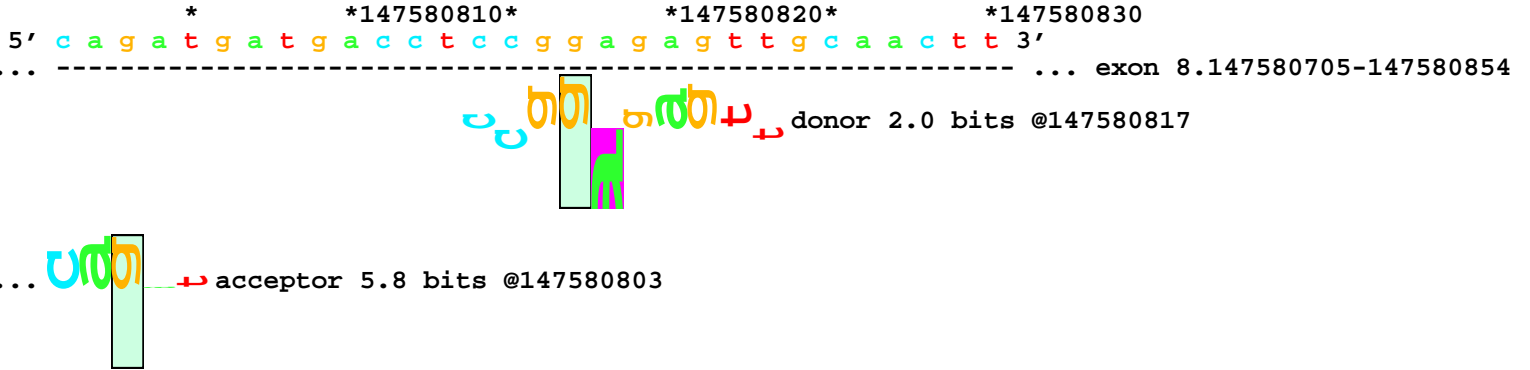
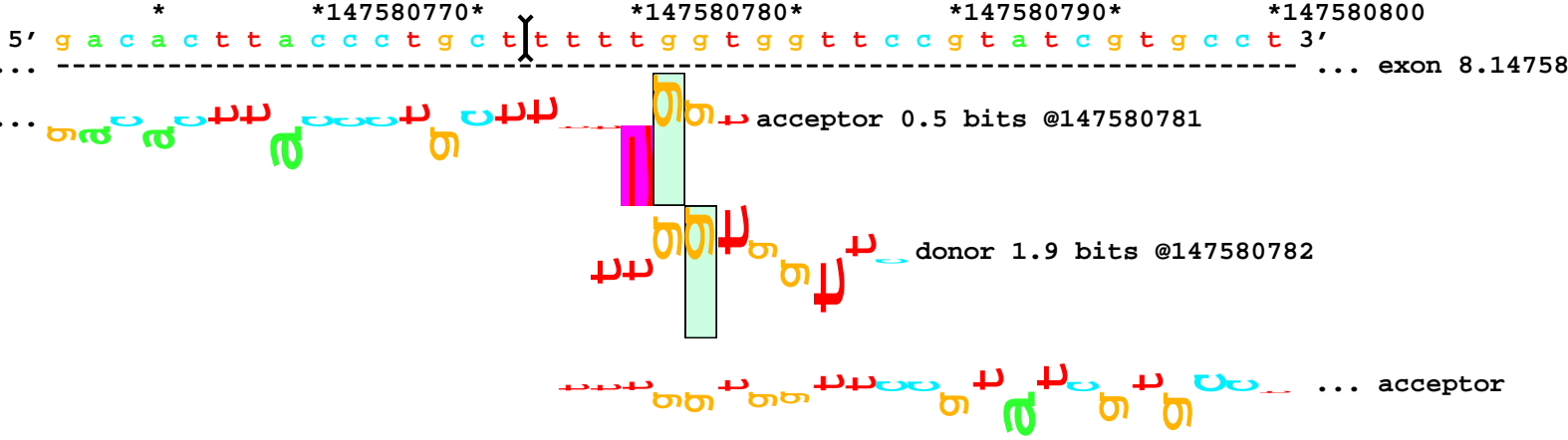
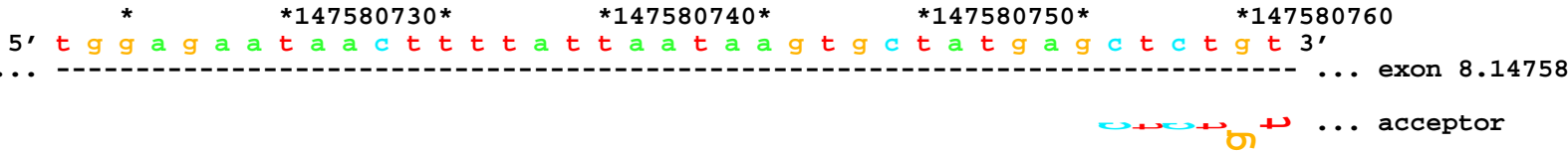
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 77, 1_77, piece 1, config: linear, direction: +, begin: 147580723, end: 147580831



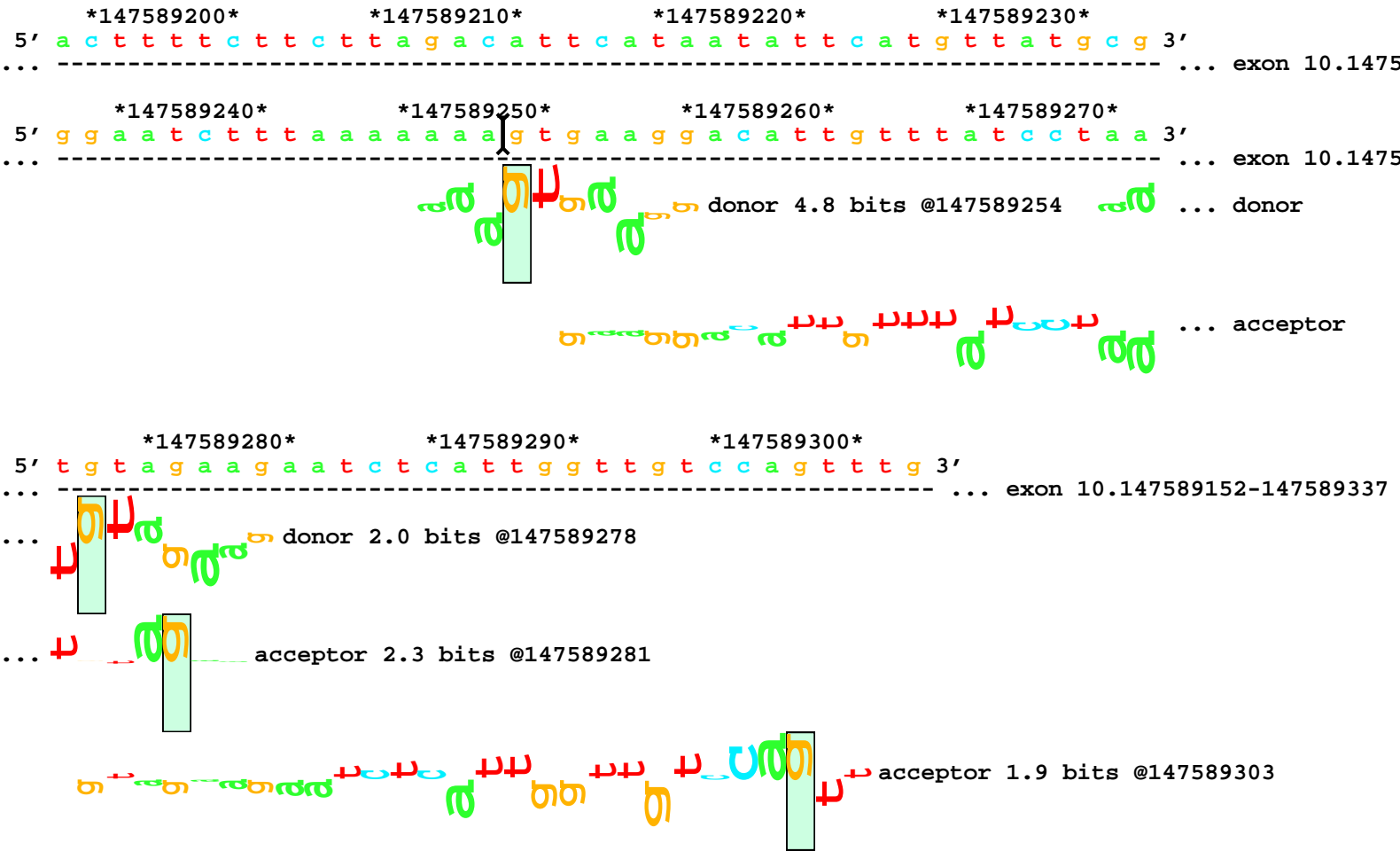
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 78, 1_78, c.601delT d147580777,147580777, config: linear, direction: +, begin: 147580723, end: 147580854



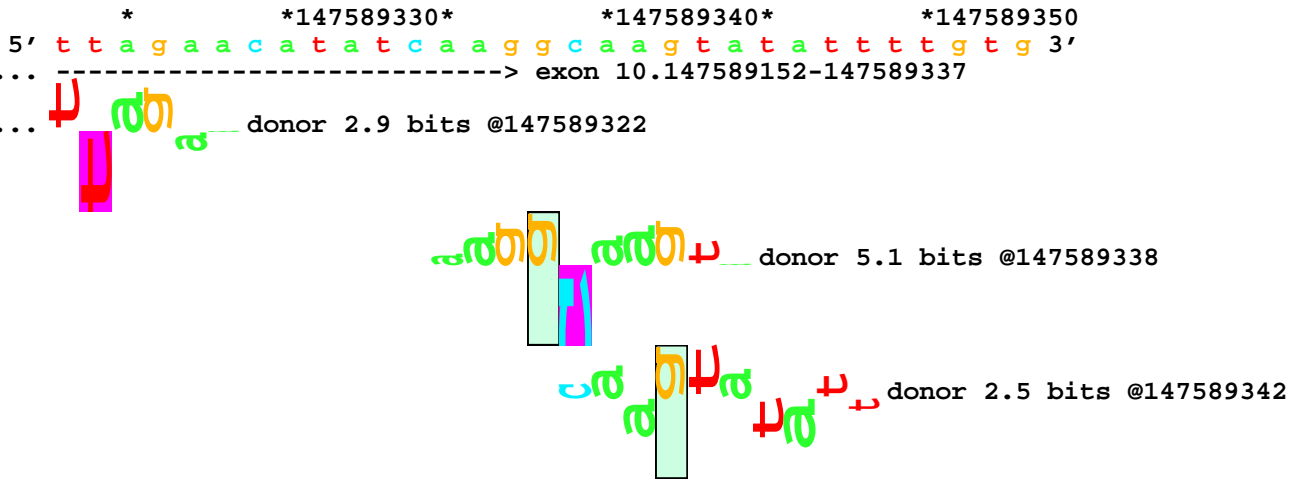
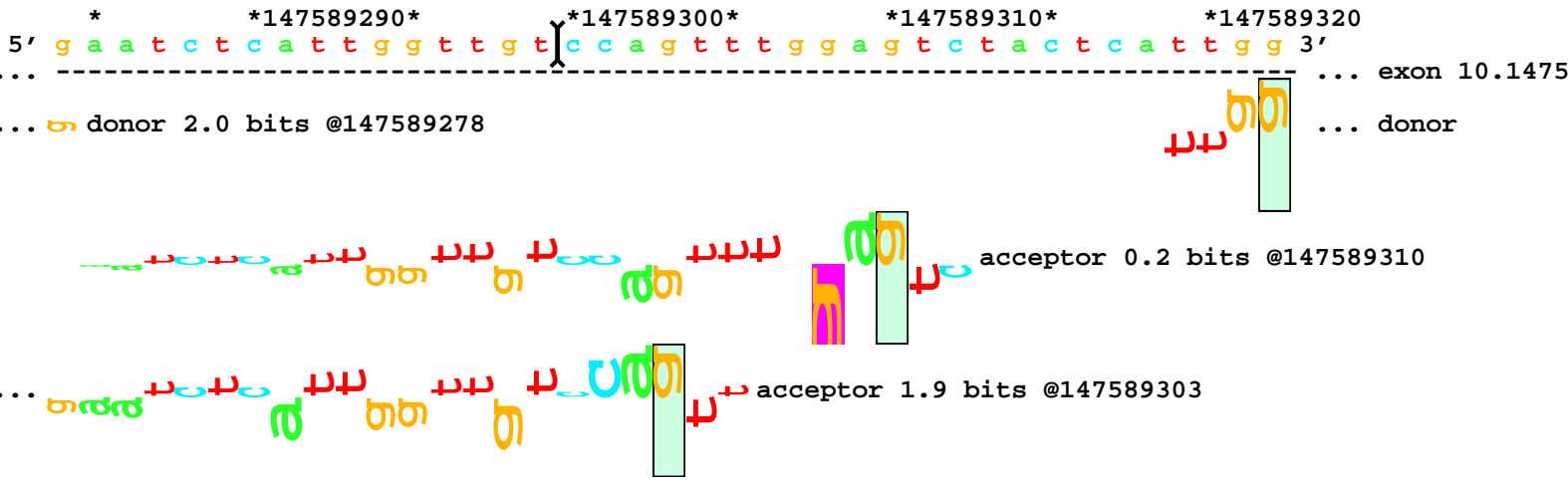
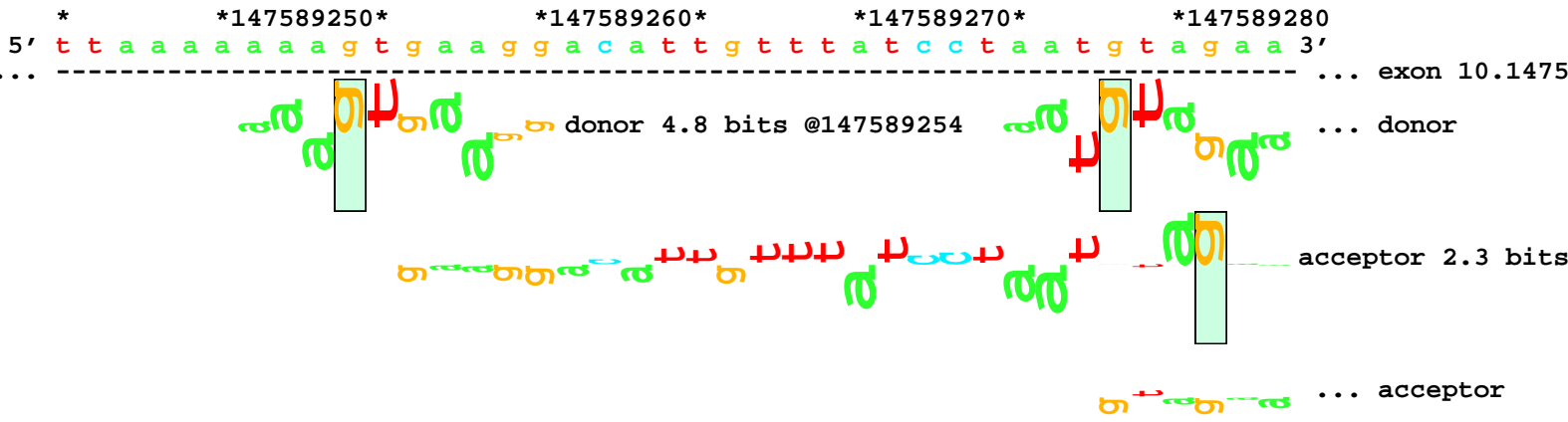
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 79, 1_79, piece 1, config: linear, direction: +, begin: 147589199, end: 147589307



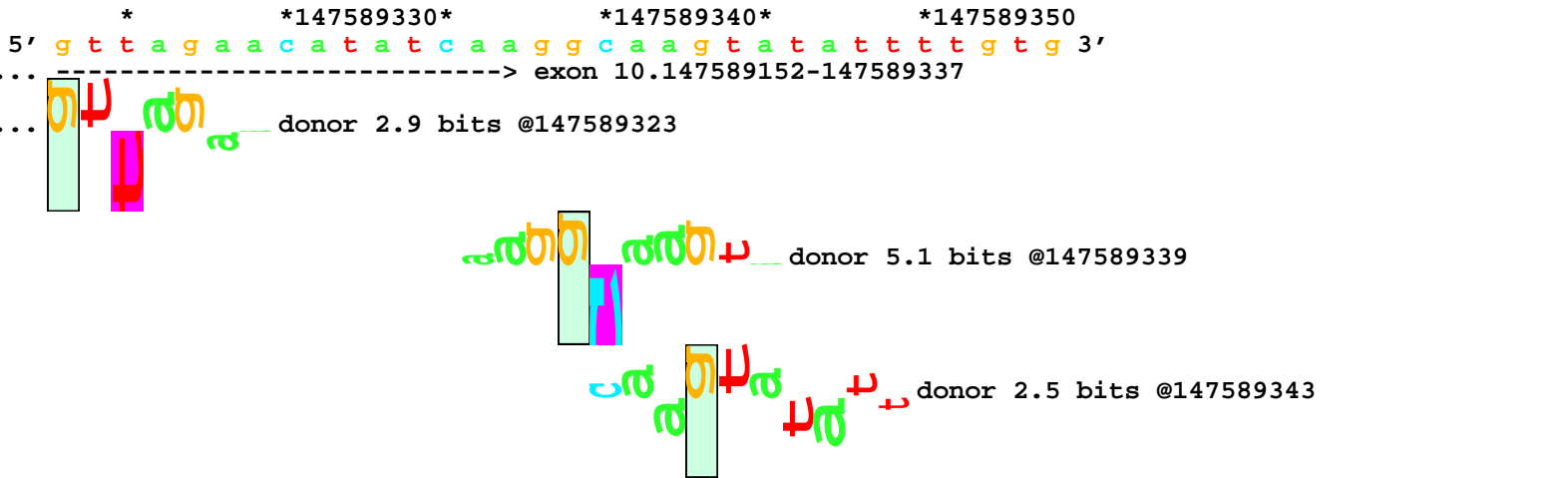
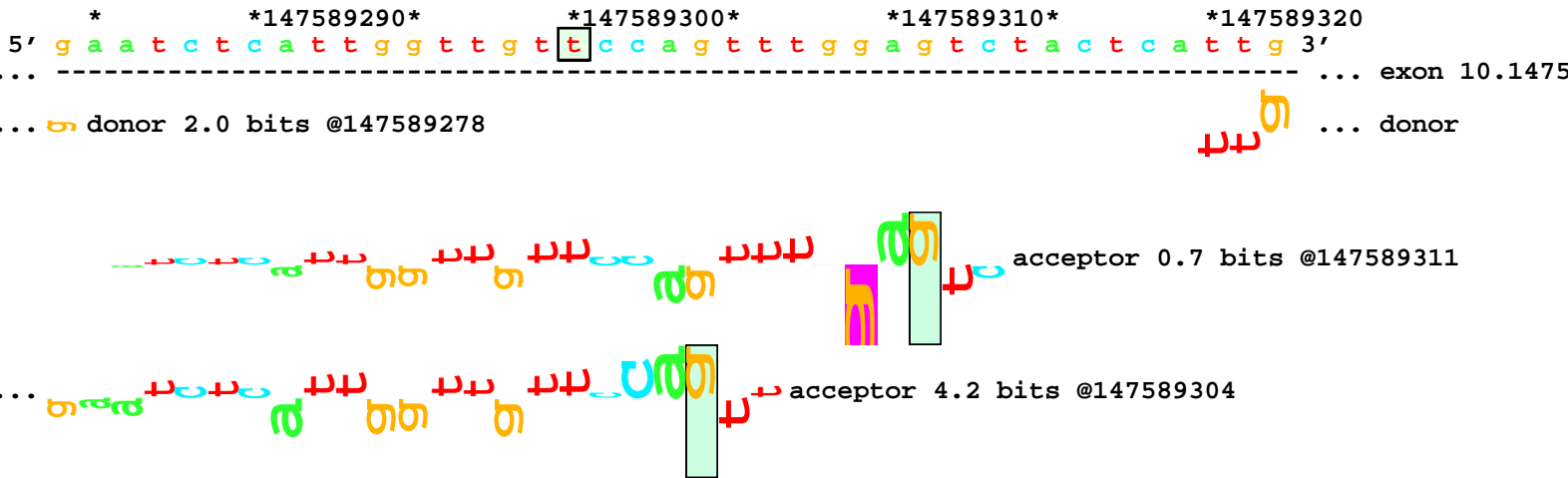
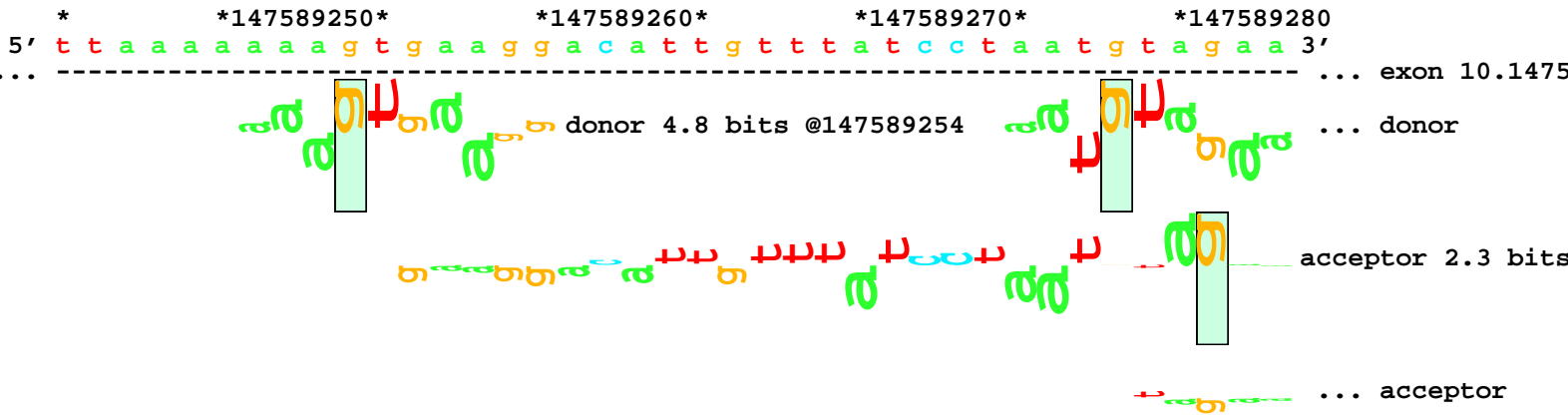
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 81, 1_81, piece 1, config: linear, direction: +, begin: 147589245, end: 147589353

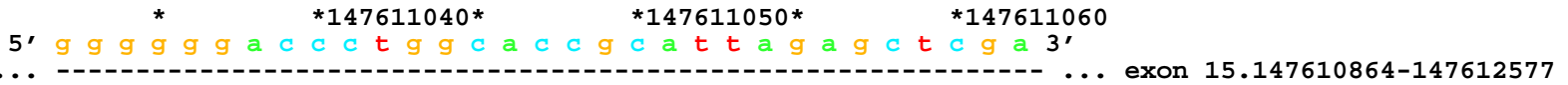
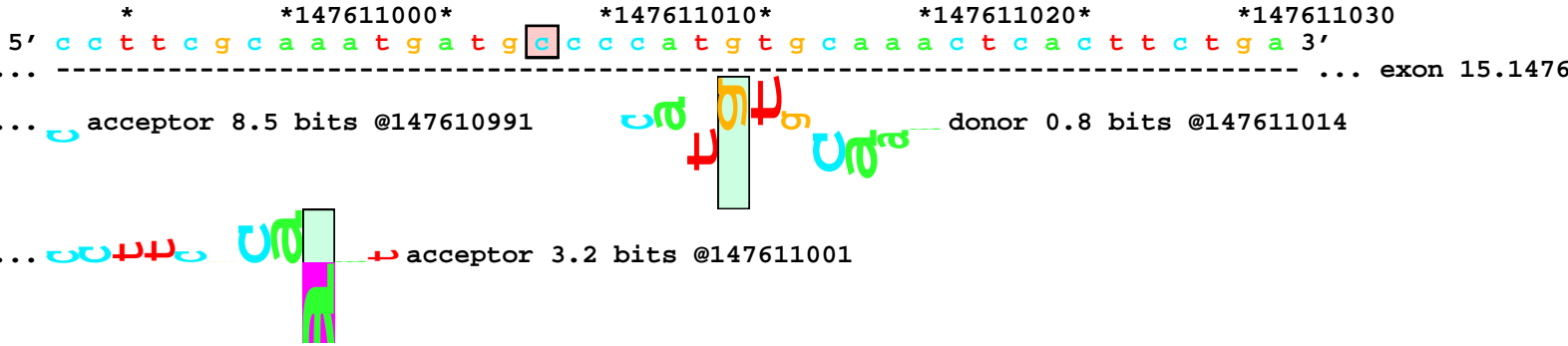
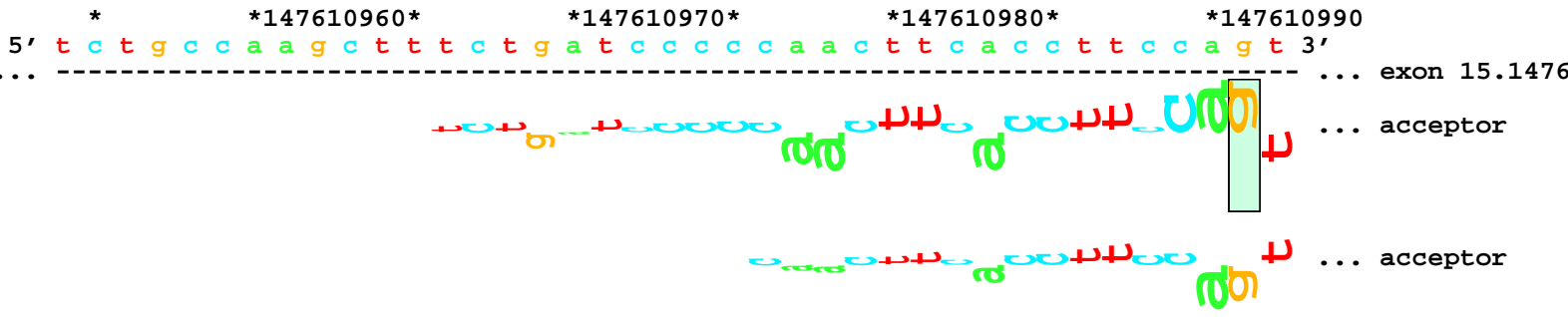


Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 82, 1_82, c.1015insT i147589299,147589300t, config: linear, direction: +, begin: 147589245,



piece 83, 1_83, piece 1, config: linear, direction: +, begin: 147610954, end: 147611062



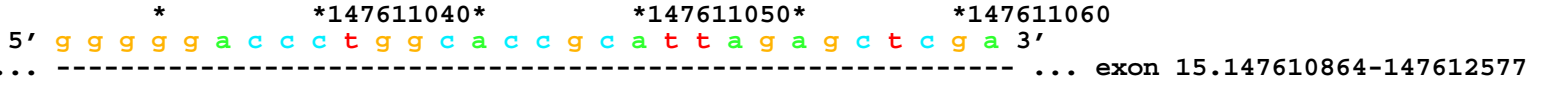
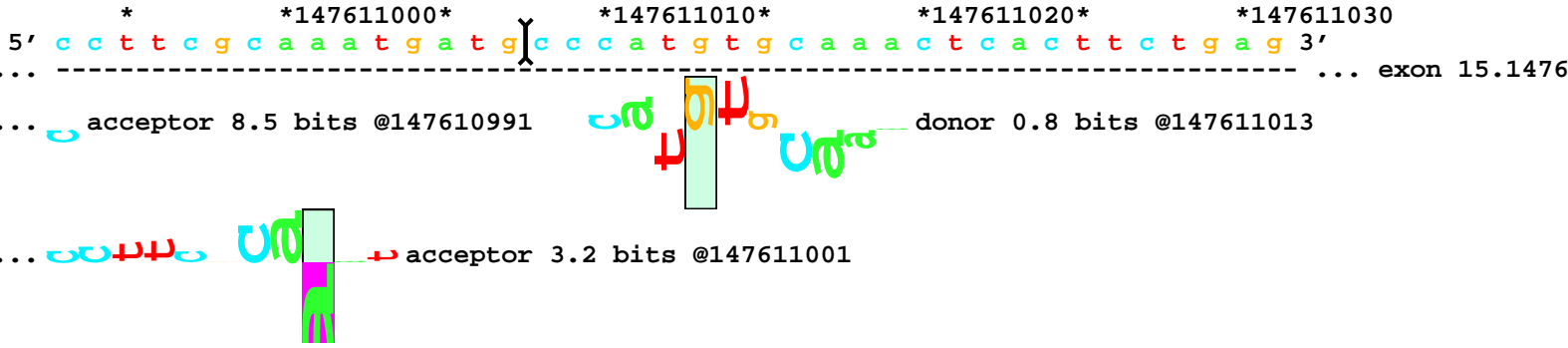
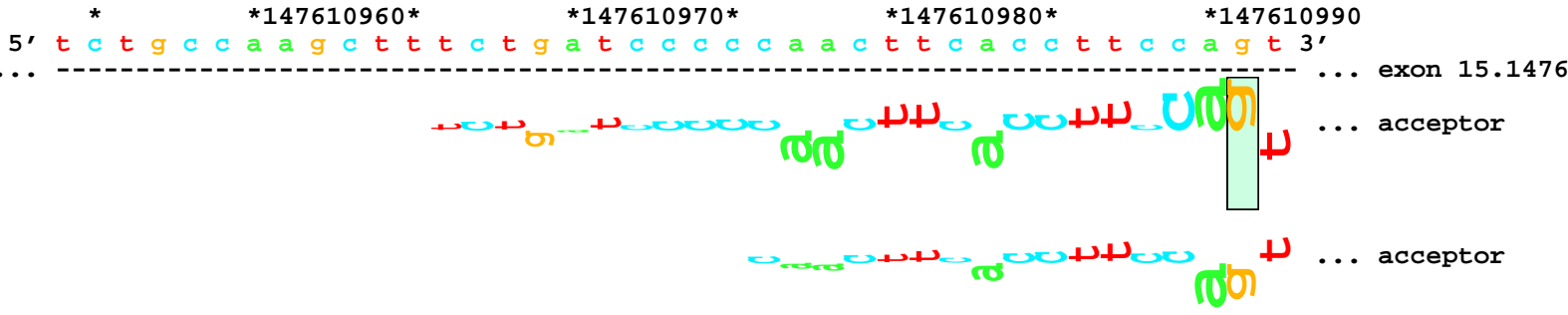
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 84, 1_84, c.1789delC d147611008,147611008, config: linear, direction: +, begin: 147610954, e



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>