

A) *D. miranda* - Four-fold degenerate sites for unpreferred codons, XL chromosome arm:

Response: Within *D. miranda* diversity

	Df	Deviance	Resid.Df	Resid. Dev	F	Pr(>F)
NULL			17	25.3338		
Gene Density	1	0.7578	16	24.5760	0.9615	0.35242
Mutation	1	1.0581	15	23.5179	1.3425	0.27641
Recombination	1	2.0402	14	21.4778	2.5886	0.14209
GC	1	0.0573	13	21.4205	0.0727	0.79354
Gene Density*Mutation	1	1.3210	12	20.0994	1.6762	0.22766
Gene Density*Recombination	1	7.2513	11	12.8481	9.2008	0.01417 *
GC*Mutation	1	0.6616	10	12.1865	0.8394	0.38345
GC*Recombination	1	5.8711	9	6.3154	7.4495	0.02325 *

B) *D. miranda* - Four-fold degenerate sites for unpreferred codons, XL chromosome arm:

Response: *D. pseudoobscura*- *D. miranda* divergence

	Df	Deviance	Resid.Df	Resid. Dev	F	Pr(>F)
NULL			17	41.125		
Gene Density	1	12.6362	16	28.489	6.7677	0.02867 *
Mutation	1	0.4304	15	28.058	0.2305	0.64258
Recombination	1	1.4995	14	26.559	0.8031	0.39351
GC	1	10.9844	13	15.574	5.8831	0.03826 *
Gene Density*Mutation	1	0.7721	12	14.802	0.4135	0.53623
Gene Density*Recombination	1	0.0077	11	14.795	0.0041	0.95034
GC*Mutation	1	0.0018	10	14.793	0.0010	0.97605
GC*Recombination	1	0.3844	9	14.408	0.2059	0.66074

C) *D. pseudoobscura* – Pikes Peak- Four-fold degenerate sites for unpreferred codons, XL chromosome arm:

Response: Within *D. pseudoobscura* diversity

	Df	Deviance	Resid.Df	Resid. Dev	F	Pr(>F)
NULL			18	42.276		
Gene Density	1	8.0291	17	34.247	10.7668	0.0082711*
Mutation	1	0.4097	16	33.837	0.5494	0.4755915
Recombination	1	19.2485	15	14.588	25.8116	0.0004774*
GC	1	1.5211	14	13.067	2.0397	0.1837143
Gene Density*Mutation	1	3.1366	13	9.931	4.2062	0.0674077
Gene Density*Recombination	1	1.5680	12	8.363	2.1026	0.1776799
GC*Mutation	1	0.6674	11	7.695	0.8949	0.3664408
GC*Recombination	1	0.2394	10	7.456	0.3210	0.5835086

D) *D. pseudoobscura* – Pikes Peak- Four-fold degenerate sites for unpreferred codons, XL chromosome arm:

Response: *D. pseudoobscura*- *D. miranda* divergence

	Df	Deviance	Resid.Df	Resid. Dev	F	Pr(>F)
NULL			18	37.157		
Gene Density	1	8.1702	17	28.987	5.8387	0.03629 *
Mutation	1	0.0643	16	28.922	0.0459	0.83458
Recombination	1	2.4114	15	26.511	1.7233	0.21860
GC	1	11.0000	14	15.511	7.8609	0.01867 *
Gene Density*Mutation	1	0.6197	13	14.891	0.4429	0.52079
Gene Density*Recombination	1	0.0485	12	14.843	0.0347	0.85605
GC*Mutation	1	0.1080	11	14.735	0.0772	0.78677
GC*Recombination	1	0.6295	10	14.105	0.4499	0.51759