

Session Parameters**Input File Tab:**

Input File Name: d:\dropbox\work\opioid_trends\joinpoint_analysis\04_opioid_rates_icd10type.csv

Delimiters: Comma Missing Character: NA File Contains Column Headers: Y

By Variables: opioid_type // race

Independent Variable: year

Shift Data Points: 0

Dependent Variable:

Run Type: Provided in Data File

Type of Variable: Age-Adjusted Rate

Count/Numerator:

Pop/Denominator:

Rate/Proportion/Pct: std_rate

Standard Error: sd

Heteroscedastic Error Option:

Standard Error (Provided)

Adjustment Variable:

Standard Population:

Log Transformation: Yes $\{\ln(y) = xb\}$

Delay Variable:

Delay Standard Error:

Advanced Tab:

Method: Grid Search

Autocorrelated Errors Options: Fit an uncorrelated errors model

AAPC Confidence Intervals: Parametric # of Resamples: Not Applicable

Ranges: Entire Range ,

Additional Ranges:

Number of Observations:

Number Joinpoints: Min: 0 Max: 3

Minimum number of observations from a joinpoint to either end of the data: 3

Minimum number of observations between two points: 4

Number of points to place between adjacent observed x values in the grid search: 0

Model Selection Method: Permutation Test

Permutation Test Options:

Overall significance level for the permutations tests: 0.05

Number of randomly permuted data sets for permutation test: 9999

Early Stopping Options: Not Applicable

Jump Model / Comparability Ratio: None

Jump Location: -1 Comparability Ratio: -1 Variance of CR: -1

Comparison Tab:

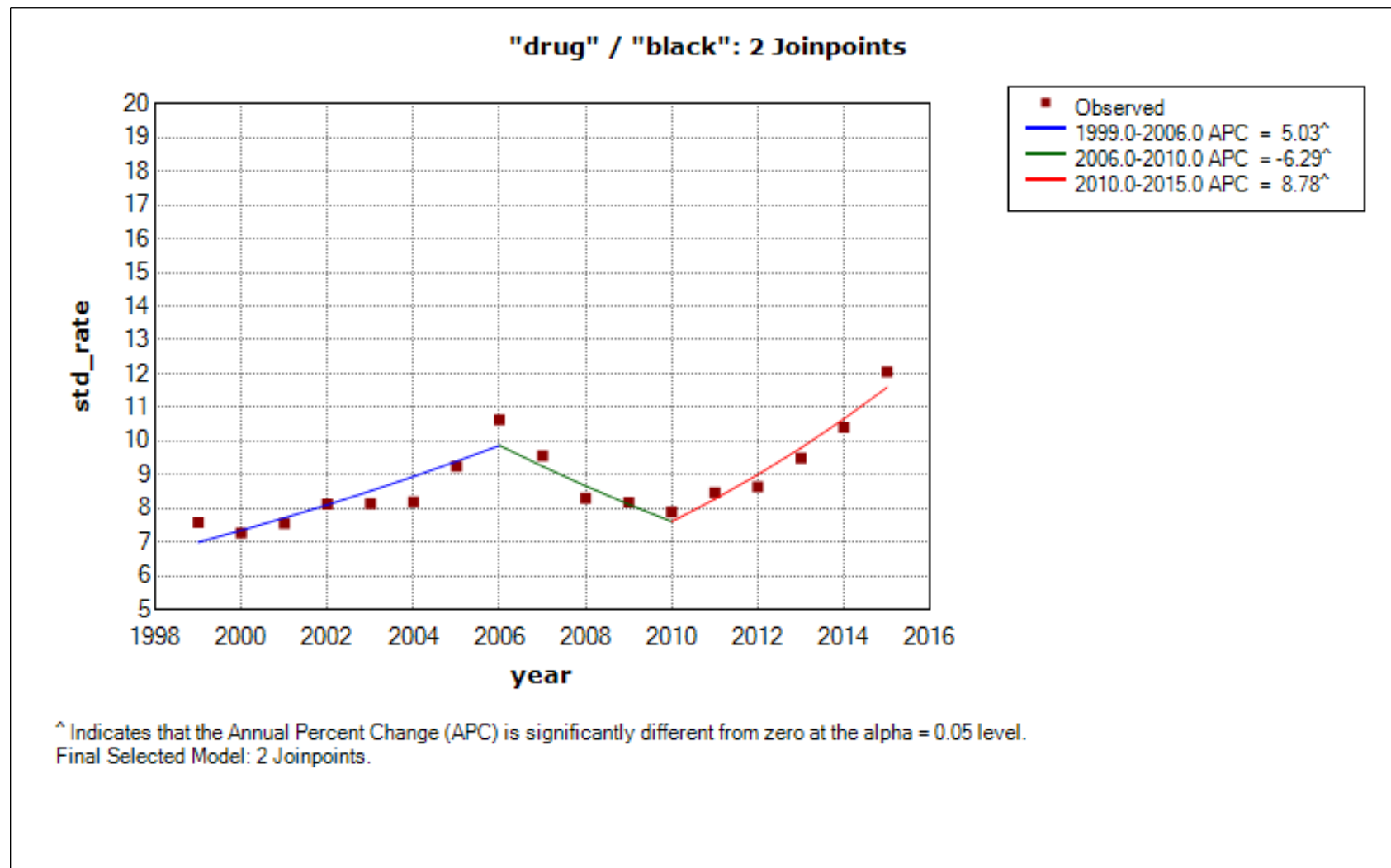
Comparison Type: None

Pairwise Comparison: Not Applicable

Significance level: Not Applicable

Max number of randomly permuted data sets: Not Applicable

"drug" \ "black"
Number of Joinpoints: 2 (Final Selected Model)



"drug" \ "black", Number of Joinpoints: 2 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	7.57892	0.15386	6.99839		5.03431^
2000	7.27093	0.14864	7.35072		5.03431^
2001	7.55213	0.15002	7.72077		5.03431^
2002	8.13343	0.15388	8.10946		5.03431^
2003	8.14291	0.15297	8.51772		5.03431^
2004	8.19022	0.15199	8.94653		5.03431^
2005	9.24541	0.15973	9.39692		5.03431^
2006	10.63721	0.17008	9.86999	Joinpoint 1	
2007	9.55940	0.15981	9.24883		- 6.29340^
2008	8.30072	0.14786	8.66677		- 6.29340^
2009	8.17778	0.14548	8.12133		- 6.29340^
2010	7.89544	0.14174	7.61023	Joinpoint 2	
2011	8.47156	0.14598	8.27854		8.78180^
2012	8.64693	0.14659	9.00555		8.78180^
2013	9.49762	0.15223	9.79639		8.78180^
2014	10.39711	0.15878	10.65669		8.78180^
2015	12.05853	0.17014	11.59254		8.78180^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"drug" \ "black", Number of Joinpoints: 2 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"black"	2	17	6	11	103.95409	9.45037	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2006	2005	2008
"black"	2	2010	2008	2013

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	-96.238963	16.900992	-5.694279	0.000296
"black"	Slope 1	0.049117	0.008441	5.818741	0.000253
"black"	Slope 2 - Slope 1	-0.114118	0.029913	-3.815002	0.004121
"black"	Slope 3 - Slope 2	0.149175	0.030988	4.814017	0.000955

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	-96.238963	16.900992	-5.694279	0.000296
"black"	Intercept 2	132.682590	57.623106	2.302594	0.046800
"black"	Intercept 3	-167.159993	23.538138	-7.101666	0.000057
"black"	Slope 1	0.049117	0.008441	5.818741	0.000253
"black"	Slope 2	-0.065002	0.028697	-2.265070	0.049763
"black"	Slope 3	0.084174	0.011692	7.199352	0.000051

- The statistic could not be calculated.

"drug" \ "black", Number of Joinpoints: 2 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	285.643514	285.643514	-0.142664	0.000000	0.000000	0.000000
"black"	Intercept 2	-0.142664	-0.142664	0.000071	0.000000	0.000000	0.000000
"black"	Intercept 3	0.000000	0.000000	0.000000	3320.422299	-1.653631	0.000000
"black"	Slope 1	0.000000	0.000000	0.000000	-1.653631	0.000824	0.000000
"black"	Slope 2	0.000000	0.000000	0.000000	0.000000	0.000000	554.043944
"black"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	-0.275205

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	1.000000	-0.999999	0.000000	0.000000	0.000000	0.000000
"black"	Intercept 2	-0.999999	1.000000	0.000000	0.000000	0.000000	0.000000
"black"	Intercept 3	0.000000	0.000000	1.000000	-1.000000	0.000000	0.000000
"black"	Slope 1	0.000000	0.000000	-1.000000	1.000000	0.000000	0.000000
"black"	Slope 2	0.000000	0.000000	0.000000	0.000000	1.000000	-1.000000
"black"	Slope 3	0.000000	0.000000	0.000000	0.000000	-1.000000	1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2006	2005	2008
"black"	2	2010	2008	2013

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"black"	1	1999	2006	5.034^	3.048	7.059	5.819	0.000
"black"	2	2006	2010	-6.293^	-12.183	-0.008	-2.265	0.050
"black"	3	2010	2015	8.782^	5.942	11.697	7.199	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

"drug" \ "black", Number of Joinpoints: 2 (Final Selected Model) continued...

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"black"	Full Range	1999	2015	3.205^	1.428	5.012	3.561	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

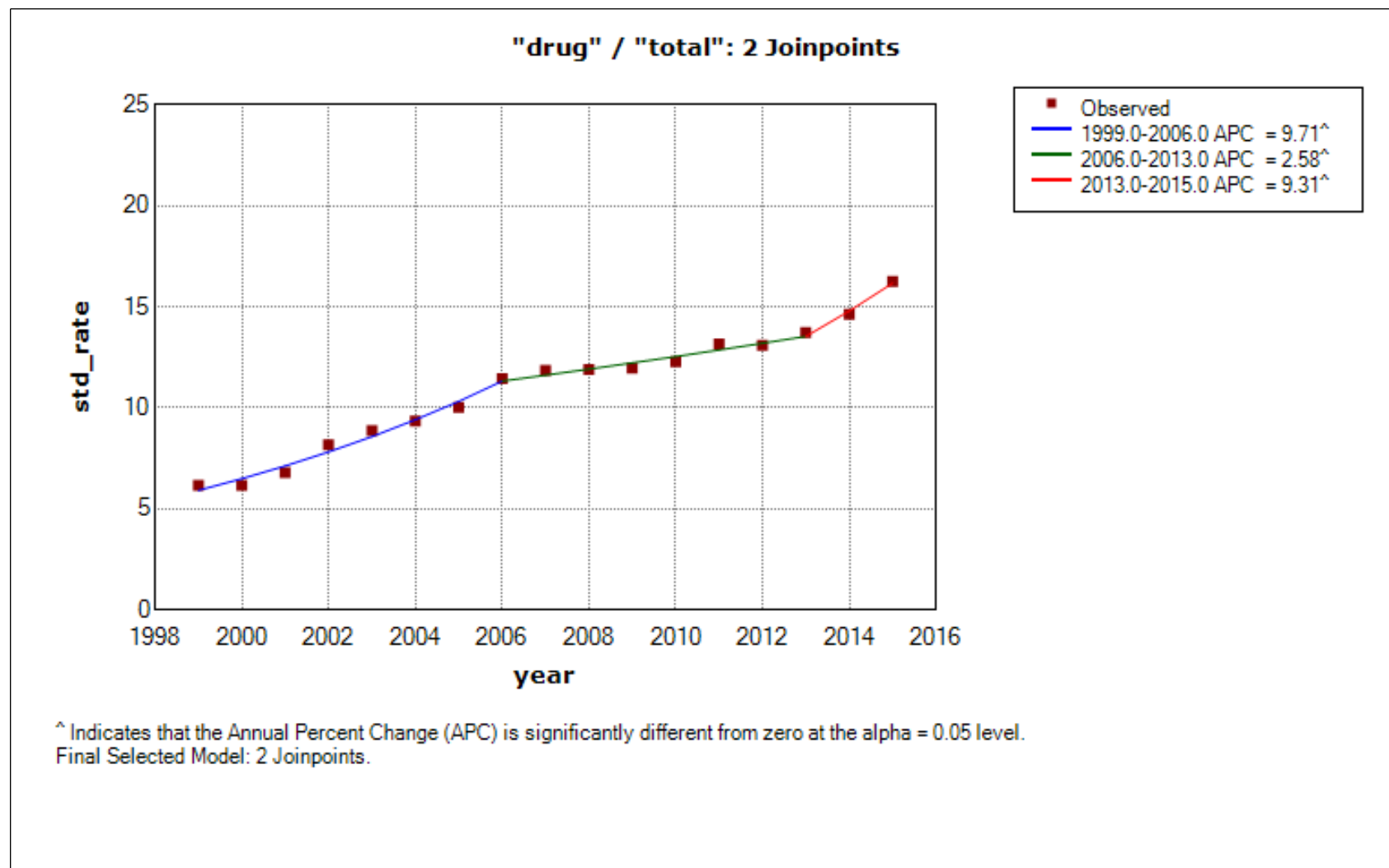
Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"black"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"black"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0004000	0.0250000
"black"	#3	2 Joinpoint(s) *	3 Joinpoint(s)	2	9	10000	0.0641000	0.0500000

Final Selected Model: "black" - 2 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test

"drug" \ "total"
Number of Joinpoints: 2 (Final Selected Model)



"drug" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	6.15329	0.04749	5.91643		9.71392^
2000	6.16293	0.04676	6.49115		9.71392^
2001	6.78975	0.04881	7.12169		9.71392^
2002	8.15978	0.05329	7.81349		9.71392^
2003	8.86709	0.05534	8.57249		9.71392^
2004	9.33629	0.05655	9.40521		9.71392^
2005	10.02482	0.05832	10.31882		9.71392^
2006	11.44701	0.06206	11.32119	Joinpoint 1	
2007	11.85186	0.06291	11.61372		2.58393^
2008	11.88489	0.06283	11.91381		2.58393^
2009	11.95305	0.06283	12.22165		2.58393^
2010	12.26744	0.06350	12.53745		2.58393^
2011	13.15214	0.06566	12.86141		2.58393^
2012	13.09477	0.06535	13.19374		2.58393^
2013	13.72663	0.06667	13.53466	Joinpoint 2	
2014	14.63326	0.06880	14.79423		9.30627^
2015	16.25080	0.07247	16.17102		9.30627^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"drug" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"total"	2	17	6	11	308.21341	28.01940	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2006	2004	2008
"total"	2	2013	2008	2013

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-183.541606	14.337451	-12.801551	0.000000
"total"	Slope 1	0.092706	0.007160	12.947557	0.000000
"total"	Slope 2 - Slope 1	-0.067195	0.009949	-6.754065	0.000083
"total"	Slope 3 - Slope 2	0.063472	0.037024	1.714354	0.120608

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-183.541606	14.337451	-12.801551	0.000000
"total"	Intercept 2	-48.748696	13.880894	-3.511928	0.006599
"total"	Intercept 3	-176.518690	73.276548	-2.408938	0.039317
"total"	Slope 1	0.092706	0.007160	12.947557	0.000000
"total"	Slope 2	0.025511	0.006907	3.693336	0.004972
"total"	Slope 3	0.088984	0.036374	2.446346	0.036978

- The statistic could not be calculated.

"drug" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	205.562502	205.562502	-0.102658	0.000000	0.000000	0.000000
"total"	Intercept 2	-0.102658	-0.102658	0.000051	0.000000	0.000000	0.000000
"total"	Intercept 3	0.000000	0.000000	0.000000	192.679219	-0.095880	0.000000
"total"	Slope 1	0.000000	0.000000	0.000000	-0.095880	0.000048	0.000000
"total"	Slope 2	0.000000	0.000000	0.000000	0.000000	0.000000	5369.452540
"total"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	-2.665367

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	1.000000	-1.000000	0.000000	0.000000	0.000000	0.000000
"total"	Intercept 2	-1.000000	1.000000	0.000000	0.000000	0.000000	0.000000
"total"	Intercept 3	0.000000	0.000000	1.000000	-1.000000	0.000000	0.000000
"total"	Slope 1	0.000000	0.000000	-1.000000	1.000000	0.000000	0.000000
"total"	Slope 2	0.000000	0.000000	0.000000	0.000000	1.000000	-1.000000
"total"	Slope 3	0.000000	0.000000	0.000000	0.000000	-1.000000	1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2006	2004	2008
"total"	2	2013	2008	2013

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"total"	1	1999	2006	9.714^	7.951	11.505	12.948	0.000
"total"	2	2006	2013	2.584^	0.993	4.199	3.693	0.005
"total"	3	2013	2015	9.306^	0.672	18.681	2.446	0.037

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

"drug" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"total"	Full Range	1999	2015	6.486^	5.180	7.808	9.984	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

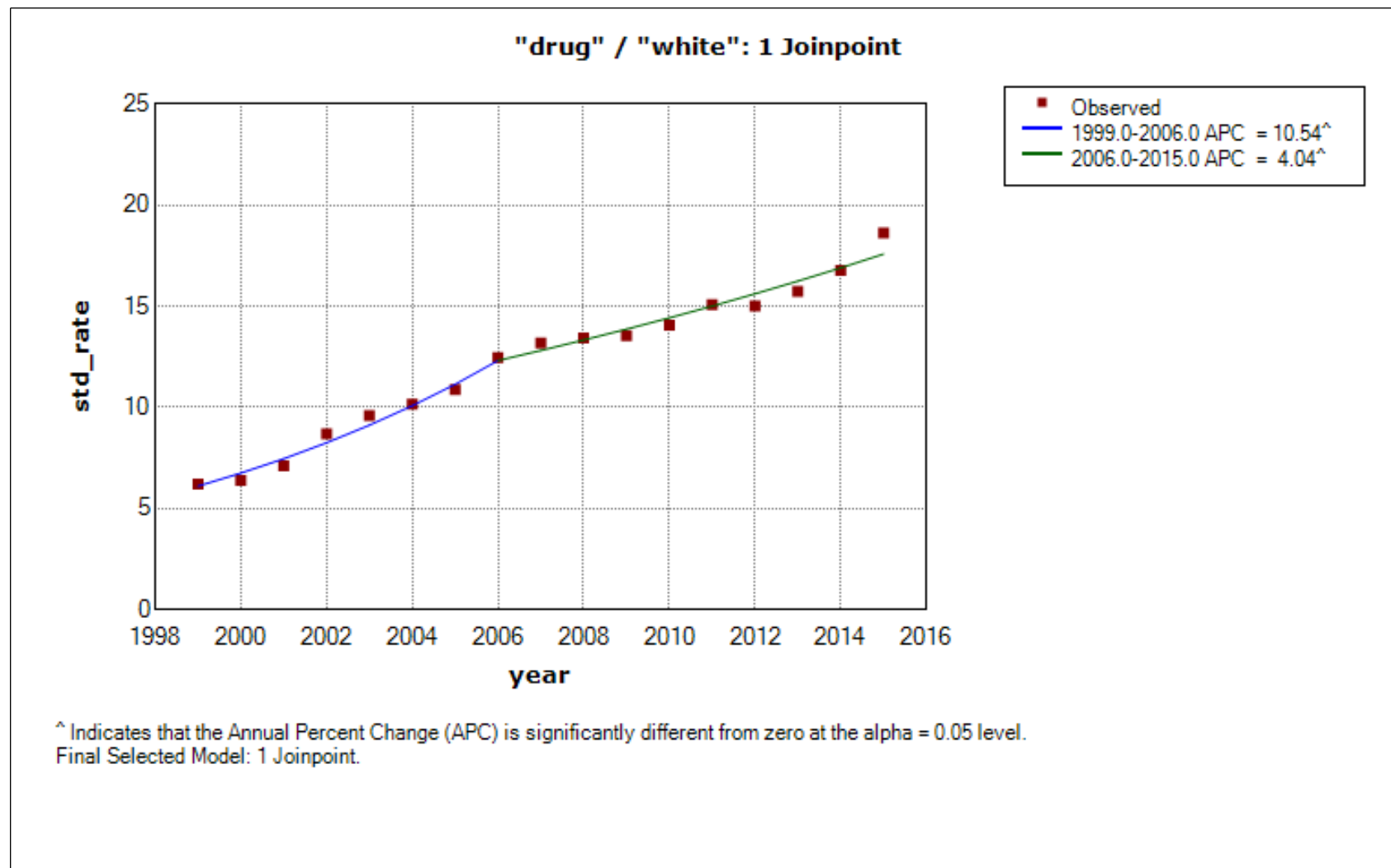
Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"total"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0002000	0.0166667
"total"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0231000	0.0250000
"total"	#3	2 Joinpoint(s) *	3 Joinpoint(s)	2	9	10000	0.8444000	0.0500000

Final Selected Model: "total" - 2 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test

"drug" \ "white"
Number of Joinpoints: 1 (Final Selected Model)



"drug" \ "white", Number of Joinpoints: 1 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	6.20986	0.05242	6.10759		10.53589^
2000	6.37418	0.05264	6.75108		10.53589^
2001	7.11267	0.05544	7.46237		10.53589^
2002	8.69700	0.06119	8.24859		10.53589^
2003	9.58020	0.06414	9.11766		10.53589^
2004	10.16266	0.06595	10.07828		10.53589^
2005	10.87593	0.06806	11.14012		10.53589^
2006	12.46153	0.07274	12.31383	Joinpoint 1	
2007	13.17497	0.07469	12.81094		4.03698^
2008	13.43744	0.07538	13.32811		4.03698^
2009	13.53661	0.07560	13.86616		4.03698^
2010	14.05542	0.07707	14.42594		4.03698^
2011	15.07957	0.07989	15.00831		4.03698^
2012	15.01549	0.07967	15.61419		4.03698^
2013	15.72849	0.08143	16.24453		4.03698^
2014	16.76410	0.08421	16.90032		4.03698^
2015	18.63200	0.08900	17.58258		4.03698^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"drug" \ "white", Number of Joinpoints: 1 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"white"	1	17	4	13	533.45234	41.03480	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2006	2003	2008

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-198.430522	18.168342	-10.921774	0.000000
"white"	Slope 1	0.100170	0.009073	11.040274	0.000000
"white"	Slope 2 - Slope 1	-0.060594	0.010111	-5.992794	0.000063

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-198.430522	18.168342	-10.921774	0.000000
"white"	Intercept 2	-76.879092	8.975073	-8.565846	0.000002
"white"	Slope 1	0.100170	0.009073	11.040274	0.000000
"white"	Slope 2	0.039576	0.004462	8.868846	0.000001

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	330.088653	330.088653		-0.164844	0.000000	
"white"	Intercept 2	-0.164844	-0.164844		0.000082	0.000000	
"white"	Slope 1	0.000000	0.000000		0.000000	80.551939	

"drug" \ "white", Number of Joinpoints: 1 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Slope 2	0.000000	0.000000		0.000000	-0.040050	

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	1.000000	-1.000000		0.000000	0.000000	
"white"	Intercept 2	-1.000000	1.000000		0.000000	0.000000	
"white"	Slope 1	0.000000	0.000000		1.000000	-0.999999	
"white"	Slope 2	0.000000	0.000000		-0.999999	1.000000	

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2006	2003	2008

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"white"	1	1999	2006	10.536^	8.372	12.743	11.040	0.000
"white"	2	2006	2015	4.037^	3.030	5.053	8.869	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"white"	Full Range	1999	2015	6.832^	5.853	7.820	14.071	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

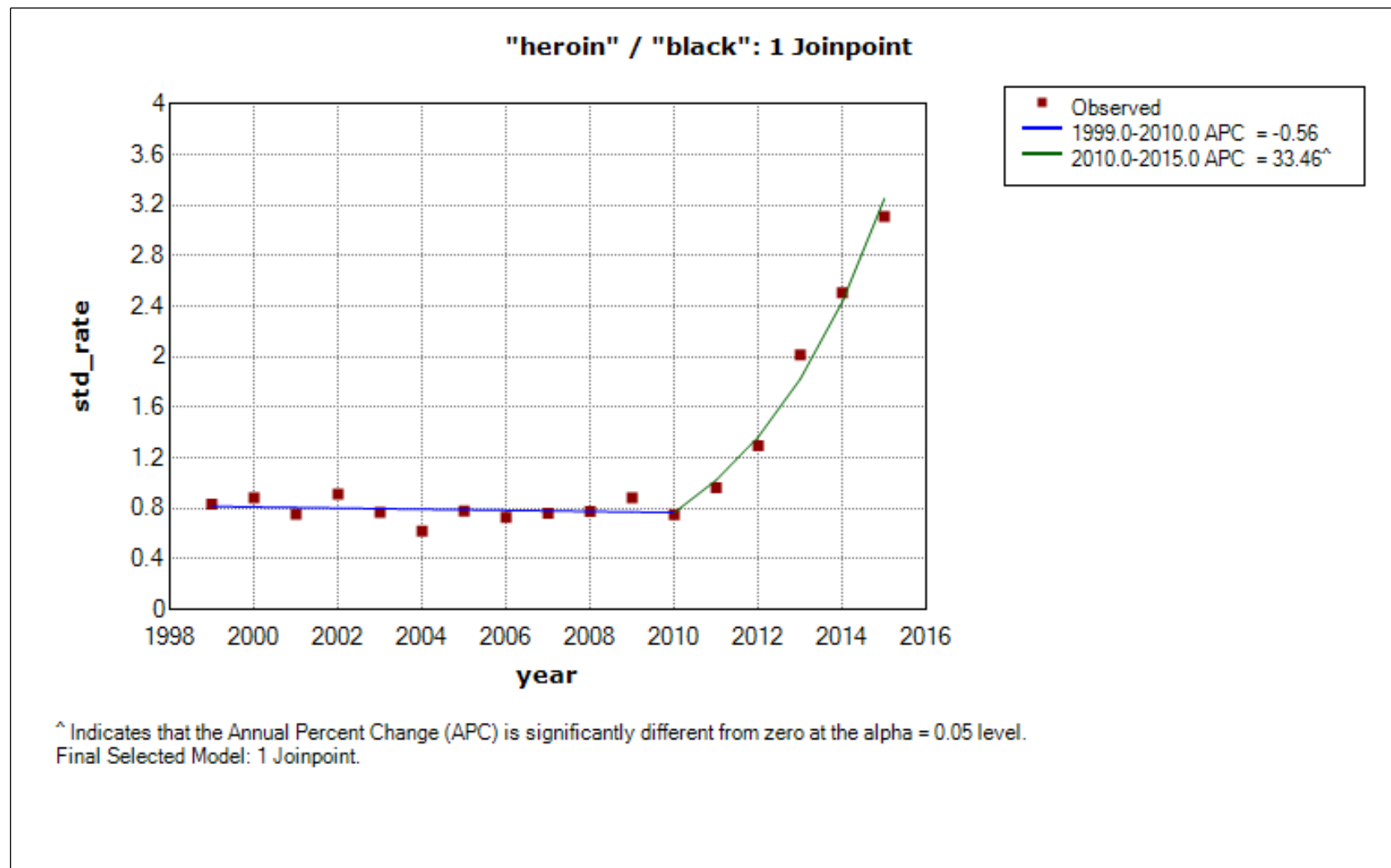
"drug" \ "white", Number of Joinpoints: 1 (Final Selected Model) continued...

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"white"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"white"	#2	1 Joinpoint(s) *	3 Joinpoint(s)	4	9	10000	0.0449000	0.0250000
"white"	#3	1 Joinpoint(s) *	2 Joinpoint(s)	2	11	10000	0.0253000	0.0250000
Final Selected Model: "white" - 1 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"heroin" \ "black"
Number of Joinpoints: 1 (Final Selected Model)



"heroin" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	0.83265	0.05096	0.81673		-0.56184
2000	0.88489	0.05153	0.81214		-0.56184
2001	0.75526	0.04722	0.80758		-0.56184
2002	0.91166	0.05145	0.80304		-0.56184
2003	0.76906	0.04667	0.79853		-0.56184
2004	0.62085	0.04162	0.79404		-0.56184
2005	0.77993	0.04634	0.78958		-0.56184
2006	0.72906	0.04424	0.78514		-0.56184
2007	0.76081	0.04501	0.78073		-0.56184
2008	0.77435	0.04466	0.77635		-0.56184
2009	0.88483	0.04745	0.77198		-0.56184
2010	0.74938	0.04333	0.76765	Joinpoint 1	
2011	0.96527	0.04888	1.02453		33.4643 ^{2^}
2012	1.29471	0.05643	1.36739		33.4643 ^{2^}
2013	2.01469	0.06956	1.82498		33.4643 ^{2^}
2014	2.50675	0.07757	2.43569		33.4643 ^{2^}
2015	3.11056	0.08603	3.25078		33.4643 ^{2^}

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"heroin" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"black"	1	17	4	13	45.26413	3.48186	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2010	2009	2011

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	11.060402	21.506090	0.514292	0.616387
"black"	Slope 1	-0.005634	0.010731	-0.525053	0.609110
"black"	Slope 2 - Slope 1	0.294298	0.025504	11.539264	0.000000

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	11.060402	21.506090	0.514292	0.616387
"black"	Intercept 2	-580.478985	46.587462	-12.459983	0.000000
"black"	Slope 1	-0.005634	0.010731	-0.525053	0.609110
"black"	Slope 2	0.288664	0.023137	12.476448	0.000000

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	462.511910	462.511910		-0.230777	0.000000	
"black"	Intercept 2	-0.230777	-0.230777		0.000115	0.000000	
"black"	Slope 1	0.000000	0.000000		0.000000	2170.391617	

"heroin" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Slope 2	0.000000	0.000000		0.000000	-1.077880	

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	1.000000	-0.999999		0.000000	0.000000	
"black"	Intercept 2	-0.999999	1.000000		0.000000	0.000000	
"black"	Slope 1	0.000000	0.000000		1.000000	-1.000000	
"black"	Slope 2	0.000000	0.000000		-1.000000	1.000000	

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2010	2009	2011

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"black"	1	1999	2010	-0.562	-2.860	1.790	-0.525	0.609
"black"	2	2010	2015	33.464^	26.903	40.365	12.476	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"black"	Full Range	1999	2015	9.017^	6.832	11.247	8.358	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

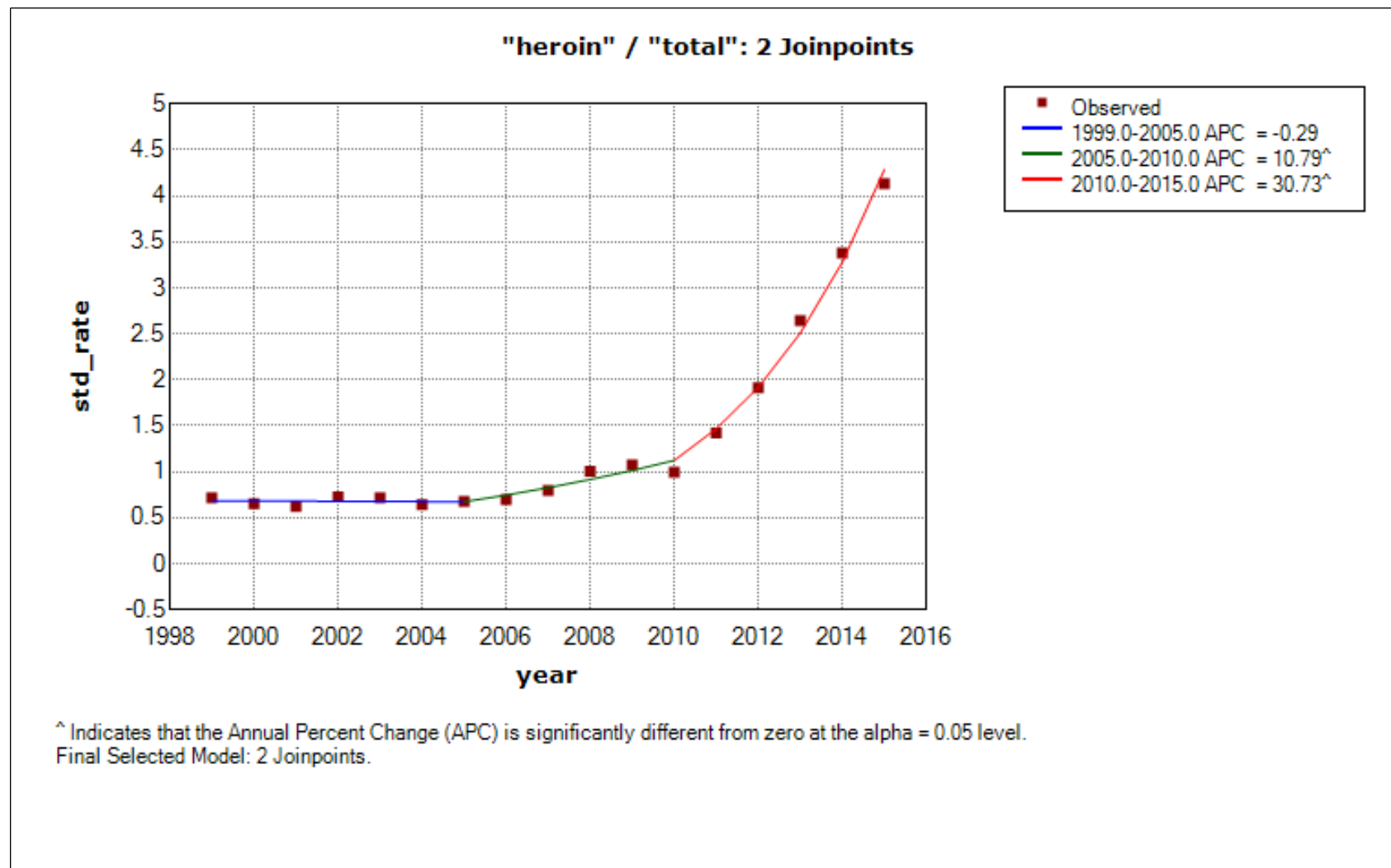
"heroin" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"black"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"black"	#2	1 Joinpoint(s) *	3 Joinpoint(s)	4	9	10000	0.5288000	0.0250000
"black"	#3	1 Joinpoint(s) *	2 Joinpoint(s)	2	11	10000	0.4730000	0.0250000
Final Selected Model: "black" - 1 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"heroin" \ "total"
Number of Joinpoints: 2 (Final Selected Model)



"heroin" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	0.71624	0.01619	0.68466		-0.29088
2000	0.65010	0.01516	0.68267		-0.29088
2001	0.62163	0.01475	0.68069		-0.29088
2002	0.72654	0.01591	0.67871		-0.29088
2003	0.71679	0.01574	0.67673		-0.29088
2004	0.63967	0.01480	0.67476		-0.29088
2005	0.67773	0.01518	0.67280	Joinpoint 1	
2006	0.69637	0.01533	0.74537		10.78559 [^]
2007	0.79647	0.01636	0.82576		10.78559 [^]
2008	1.00559	0.01837	0.91482		10.78559 [^]
2009	1.07349	0.01891	1.01349		10.78559 [^]
2010	0.99225	0.01819	1.12280	Joinpoint 2	
2011	1.42141	0.02168	1.46783		30.72952 [^]
2012	1.91435	0.02518	1.91889		30.72952 [^]
2013	2.64423	0.02951	2.50856		30.72952 [^]
2014	3.37897	0.03335	3.27942		30.72952 [^]
2015	4.13120	0.03683	4.28717		30.72952 [^]

[^] Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"heroin" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"total"	2	17	6	11	193.74784	17.61344	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2005	2001	2008
"total"	2	2010	2009	2012

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	5.444264	38.079846	0.142970	0.889464
"total"	Slope 1	-0.002913	0.019025	-0.153111	0.881689
"total"	Slope 2 - Slope 1	0.105339	0.036208	2.909274	0.017332
"total"	Slope 3 - Slope 2	0.165534	0.033415	4.953850	0.000787

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	5.444264	38.079846	0.142970	0.889464
"total"	Intercept 2	-205.761405	61.850790	-3.326738	0.008845
"total"	Intercept 3	-538.484280	26.059934	-20.663301	0.000000
"total"	Slope 1	-0.002913	0.019025	-0.153111	0.881689
"total"	Slope 2	0.102426	0.030807	3.324790	0.008872
"total"	Slope 3	0.267960	0.012943	20.703881	0.000000

- The statistic could not be calculated.

"heroin" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	1450.074649	1450.074649	-0.724485	0.000000	0.000000	0.000000
"total"	Intercept 2	-0.724485	-0.724485	0.000362	0.000000	0.000000	0.000000
"total"	Intercept 3	0.000000	0.000000	0.000000	3825.520283	-1.905431	0.000000
"total"	Slope 1	0.000000	0.000000	0.000000	-1.905431	0.000949	0.000000
"total"	Slope 2	0.000000	0.000000	0.000000	0.000000	0.000000	679.120181
"total"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	-0.337281

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	1.000000	-1.000000	0.000000	0.000000	0.000000	0.000000
"total"	Intercept 2	-1.000000	1.000000	0.000000	0.000000	0.000000	0.000000
"total"	Intercept 3	0.000000	0.000000	1.000000	-1.000000	0.000000	0.000000
"total"	Slope 1	0.000000	0.000000	-1.000000	1.000000	0.000000	0.000000
"total"	Slope 2	0.000000	0.000000	0.000000	0.000000	1.000000	-1.000000
"total"	Slope 3	0.000000	0.000000	0.000000	0.000000	-1.000000	1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2005	2001	2008
"total"	2	2010	2009	2012

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"total"	1	1999	2005	-0.291	-4.491	4.094	-0.153	0.882
"total"	2	2005	2010	10.786^	3.328	18.782	3.325	0.009
"total"	3	2010	2015	30.730^	26.958	34.614	20.704	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

"heroin" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"total"	Full Range	1999	2015	12.148^	9.403	14.963	9.066	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

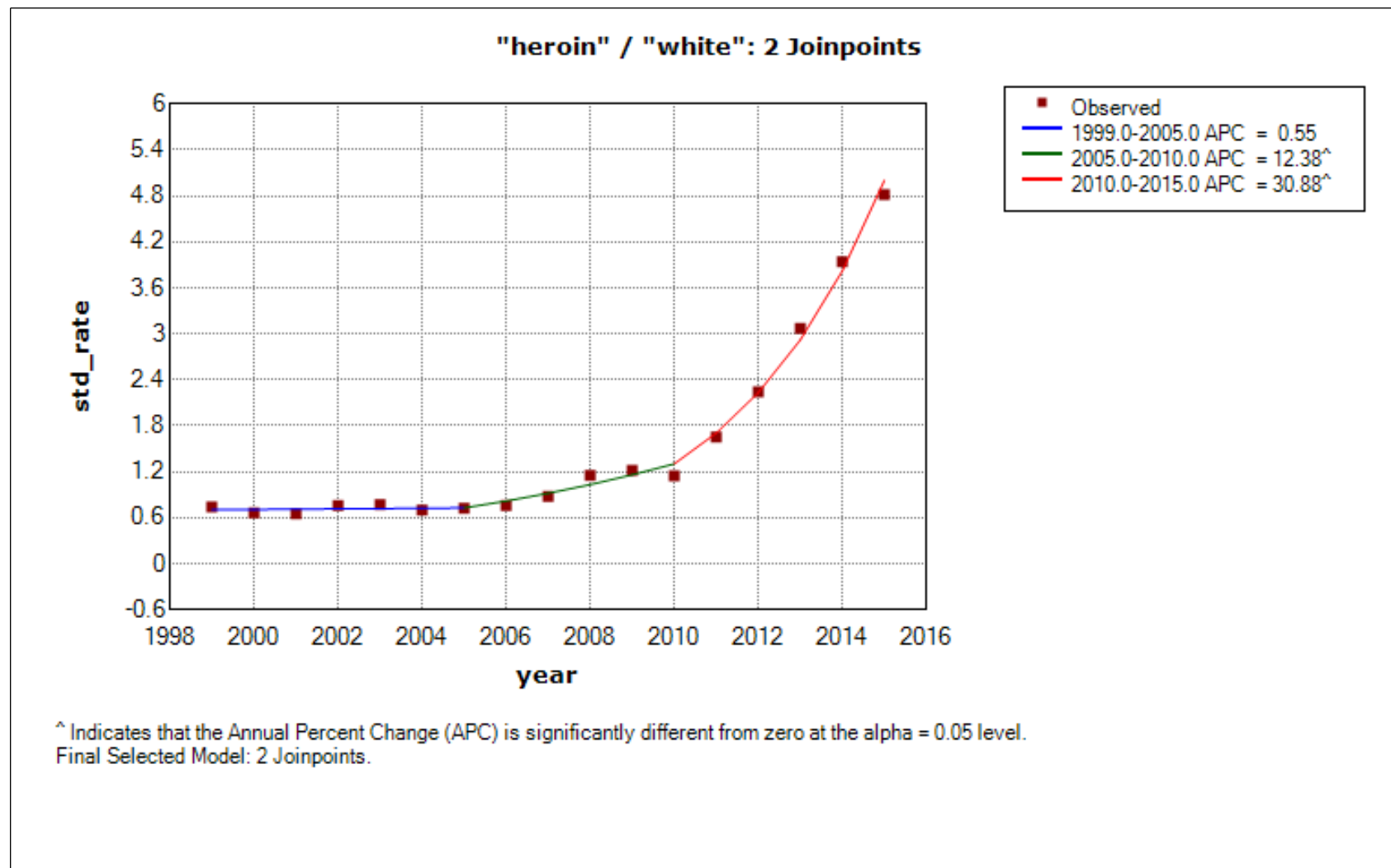
Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"total"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"total"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0090000	0.0250000
"total"	#3	2 Joinpoint(s) *	3 Joinpoint(s)	2	9	10000	0.2394000	0.0500000

Final Selected Model: "total" - 2 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test

"heroin" \ "white"
Number of Joinpoints: 2 (Final Selected Model)



"heroin" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	0.74068	0.01815	0.70336		0.55296
2000	0.66313	0.01702	0.70725		0.55296
2001	0.65272	0.01685	0.71116		0.55296
2002	0.75897	0.01816	0.71509		0.55296
2003	0.76771	0.01823	0.71905		0.55296
2004	0.69788	0.01737	0.72302		0.55296
2005	0.72317	0.01766	0.72702	Joinpoint 1	
2006	0.75860	0.01806	0.81700		12.37718 [^]
2007	0.87899	0.01945	0.91813		12.37718 [^]
2008	1.15181	0.02236	1.03176		12.37718 [^]
2009	1.21738	0.02293	1.15947		12.37718 [^]
2010	1.14451	0.02231	1.30298	Joinpoint 2	
2011	1.65441	0.02676	1.70528		30.87576 [^]
2012	2.24338	0.03123	2.23180		30.87576 [^]
2013	3.06822	0.03653	2.92089		30.87576 [^]
2014	3.94189	0.04146	3.82273		30.87576 [^]
2015	4.81705	0.04586	5.00303		30.87576 [^]

[^] Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"heroin" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"white"	2	17	6	11	179.42790	16.31163	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2005	2001	2008
"white"	2	2010	2008	2012

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-11.375073	39.345596	-0.289107	0.779049
"white"	Slope 1	0.005514	0.019658	0.280519	0.785421
"white"	Slope 2 - Slope 1	0.111176	0.037217	2.987237	0.015269
"white"	Slope 3 - Slope 2	0.152388	0.034220	4.453129	0.001593

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-11.375073	39.345596	-0.289107	0.779049
"white"	Intercept 2	-234.283650	63.447552	-3.692556	0.004978
"white"	Intercept 3	-540.582760	26.433213	-20.450891	0.000000
"white"	Slope 1	0.005514	0.019658	0.280519	0.785421
"white"	Slope 2	0.116691	0.031602	3.692504	0.004978
"white"	Slope 3	0.269078	0.013128	20.496604	0.000000

- The statistic could not be calculated.

"heroin" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	1548.075940	1548.075940	-0.773442	0.000000	0.000000	0.000000
"white"	Intercept 2	-0.773442	-0.773442	0.000386	0.000000	0.000000	0.000000
"white"	Intercept 3	0.000000	0.000000	0.000000	4025.591824	-2.005072	0.000000
"white"	Slope 1	0.000000	0.000000	0.000000	-2.005072	0.000999	0.000000
"white"	Slope 2	0.000000	0.000000	0.000000	0.000000	0.000000	698.714761
"white"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	-0.347014

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	1.000000	-1.000000	0.000000	0.000000	0.000000	0.000000
"white"	Intercept 2	-1.000000	1.000000	0.000000	0.000000	0.000000	0.000000
"white"	Intercept 3	0.000000	0.000000	1.000000	-1.000000	0.000000	0.000000
"white"	Slope 1	0.000000	0.000000	-1.000000	1.000000	0.000000	0.000000
"white"	Slope 2	0.000000	0.000000	0.000000	0.000000	1.000000	-1.000000
"white"	Slope 3	0.000000	0.000000	0.000000	0.000000	-1.000000	1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2005	2001	2008
"white"	2	2010	2008	2012

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"white"	1	1999	2005	0.553	-3.821	5.125	0.281	0.785
"white"	2	2005	2010	12.377^	4.624	20.705	3.693	0.005
"white"	3	2010	2015	30.876^	27.046	34.821	20.497	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

"heroin" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"white"	Full Range	1999	2015	13.046^	10.204	15.960	9.441	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

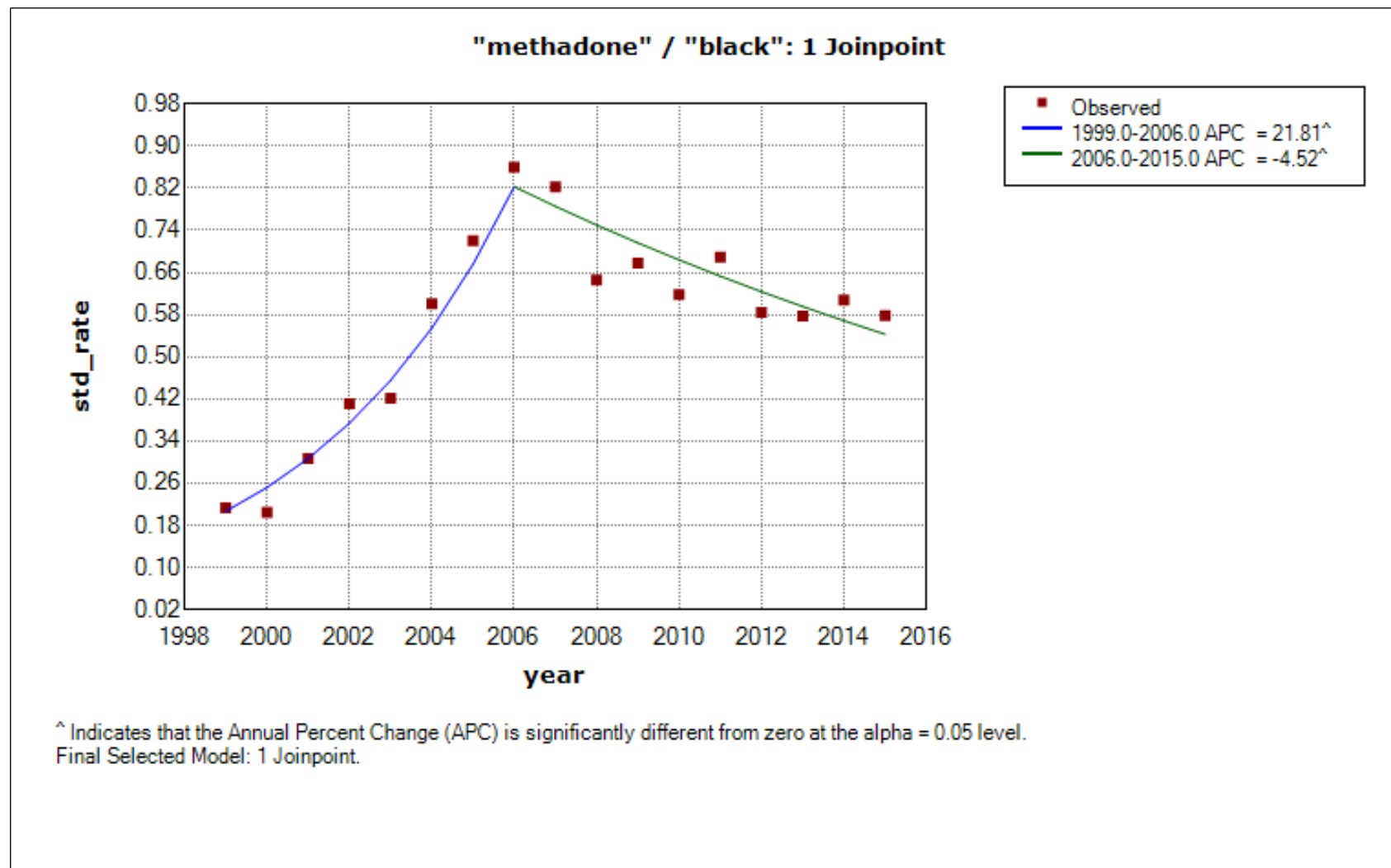
Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"white"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"white"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0097000	0.0250000
"white"	#3	2 Joinpoint(s) *	3 Joinpoint(s)	2	9	10000	0.2455000	0.0500000

Final Selected Model: "white" - 2 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test

"methadone" \ "black"
Number of Joinpoints: 1 (Final Selected Model)



"methadone" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	0.21303	0.02546	0.20687		21.8058 2^
2000	0.20458	0.02459	0.25198		21.8058 2^
2001	0.30720	0.02996	0.30692		21.8058 2^
2002	0.41107	0.03436	0.37385		21.8058 2^
2003	0.42168	0.03449	0.45537		21.8058 2^
2004	0.60030	0.04053	0.55467		21.8058 2^
2005	0.72077	0.04432	0.67562		21.8058 2^
2006	0.85997	0.04806	0.82294	Joinpoint 1	
2007	0.82283	0.04633	0.78576		- 4.51772^
2008	0.64583	0.04087	0.75026		- 4.51772^
2009	0.67814	0.04130	0.71637		- 4.51772^
2010	0.61847	0.03907	0.68401		- 4.51772^
2011	0.68947	0.04127	0.65310		- 4.51772^
2012	0.58408	0.03764	0.62360		- 4.51772^
2013	0.57695	0.03733	0.59543		- 4.51772^
2014	0.60802	0.03805	0.56853		- 4.51772^
2015	0.57828	0.03686	0.54284		- 4.51772^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"methadone" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"black"	1	17	4	13	22.19573	1.70736	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2006	2004	2007

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	-395.894386	39.426470	-10.041335	0.000000
"black"	Slope 1	0.197258	0.019685	10.020933	0.000000
"black"	Slope 2 - Slope 1	-0.243487	0.021772	-11.183502	0.000000

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	-395.894386	39.426470	-10.041335	0.000000
"black"	Intercept 2	92.541458	18.706165	4.947110	0.000338
"black"	Slope 1	0.197258	0.019685	10.020933	0.000000
"black"	Slope 2	-0.046229	0.009303	-4.969539	0.000326

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	1554.446573	1554.446573		-0.776094	0.000000	
"black"	Intercept 2	-0.776094	-0.776094		0.000387	0.000000	
"black"	Slope 1	0.000000	0.000000		0.000000	349.920607	

"methadone" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Slope 2	0.000000	0.000000		0.000000	-0.174015	

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	1.000000	-1.000000		0.000000	0.000000	
"black"	Intercept 2	-1.000000	1.000000		0.000000	0.000000	
"black"	Slope 1	0.000000	0.000000		1.000000	-0.999999	
"black"	Slope 2	0.000000	0.000000		-0.999999	1.000000	

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2006	2004	2007

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"black"	1	1999	2006	21.806^	16.692	27.144	10.021	0.000
"black"	2	2006	2015	-4.518^	-6.434	-2.563	-4.970	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"black"	Full Range	1999	2015	6.215^	4.138	8.334	5.984	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

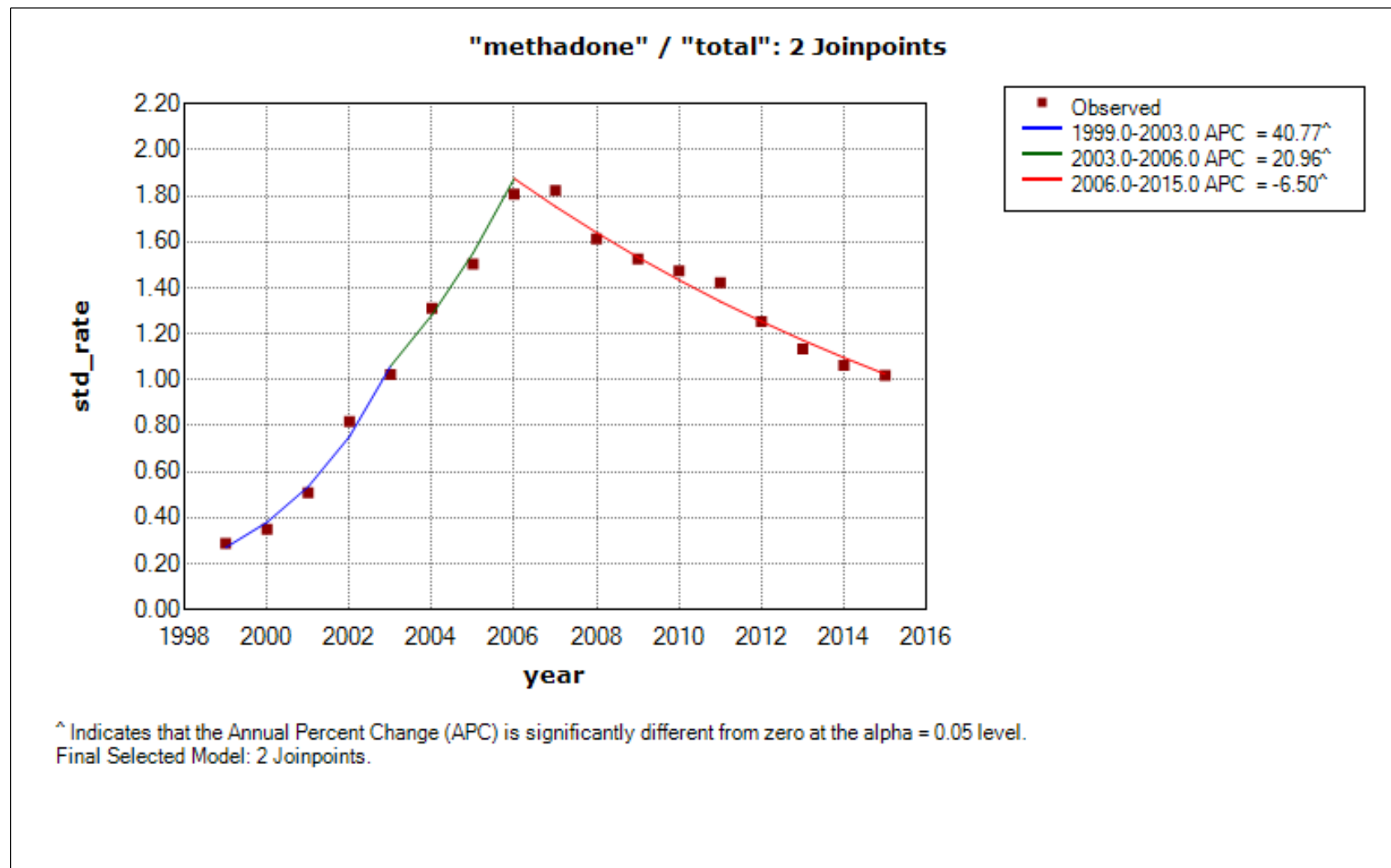
"methadone" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"black"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"black"	#2	1 Joinpoint(s) *	3 Joinpoint(s)	4	9	10000	0.2038000	0.0250000
"black"	#3	1 Joinpoint(s) *	2 Joinpoint(s)	2	11	10000	0.0691000	0.0250000
Final Selected Model: "black" - 1 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"methadone" \ "total"
Number of Joinpoints: 2 (Final Selected Model)



"methadone" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	0.28704	0.01025	0.26988		40.7737 3^
2000	0.34960	0.01114	0.37992		40.7737 3^
2001	0.50907	0.01336	0.53482		40.7737 3^
2002	0.81829	0.01687	0.75289		40.7737 3^
2003	1.02318	0.01880	1.05987	Joinpoint 1	
2004	1.31161	0.02121	1.28199		20.9567 5^
2005	1.50454	0.02261	1.55065		20.9567 5^
2006	1.80698	0.02469	1.87562	Joinpoint 2	
2007	1.82391	0.02470	1.75380		- 6.49511^
2008	1.61364	0.02317	1.63988		- 6.49511^
2009	1.52640	0.02250	1.53337		- 6.49511^
2010	1.47450	0.02205	1.43378		- 6.49511^
2011	1.42137	0.02168	1.34065		- 6.49511^
2012	1.25315	0.02031	1.25358		- 6.49511^
2013	1.13455	0.01928	1.17215		- 6.49511^
2014	1.06290	0.01859	1.09602		- 6.49511^
2015	1.01941	0.01814	1.02483		- 6.49511^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"methadone" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"total"	2	17	6	11	81.59160	7.41742	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2003	2001	2005
"total"	2	2006	2005	2008

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-684.935186	58.749960	-11.658479	0.000001
"total"	Slope 1	0.341984	0.029361	11.647620	0.000001
"total"	Slope 2 - Slope 1	-0.151721	0.059820	-2.536286	0.031905
"total"	Slope 3 - Slope 2	-0.257419	0.052338	-4.918410	0.000826

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-684.935186	58.749960	-11.658479	0.000001
"total"	Intercept 2	-381.038275	104.474348	-3.647195	0.005341
"total"	Intercept 3	135.344701	9.615140	14.076207	0.000000
"total"	Slope 1	0.341984	0.029361	11.647620	0.000001
"total"	Slope 2	0.190263	0.052119	3.650550	0.005313
"total"	Slope 3	-0.067156	0.004782	-14.042578	0.000000

- The statistic could not be calculated.

"methadone" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	3451.557749	3451.557749	-1.724947	0.000000	0.000000	0.000000
"total"	Intercept 2	-1.724947	-1.724947	0.000862	0.000000	0.000000	0.000000
"total"	Intercept 3	0.000000	0.000000	0.000000	10914.889441	-5.445093	0.000000
"total"	Slope 1	0.000000	0.000000	0.000000	-5.445093	0.002716	0.000000
"total"	Slope 2	0.000000	0.000000	0.000000	0.000000	0.000000	92.450923
"total"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	-0.045983

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	1.000000	-1.000000	0.000000	0.000000	0.000000	0.000000
"total"	Intercept 2	-1.000000	1.000000	0.000000	0.000000	0.000000	0.000000
"total"	Intercept 3	0.000000	0.000000	1.000000	-1.000000	0.000000	0.000000
"total"	Slope 1	0.000000	0.000000	-1.000000	1.000000	0.000000	0.000000
"total"	Slope 2	0.000000	0.000000	0.000000	0.000000	1.000000	-0.999999
"total"	Slope 3	0.000000	0.000000	0.000000	0.000000	-0.999999	1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2003	2001	2005
"total"	2	2006	2005	2008

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"total"	1	1999	2003	40.774^	31.727	50.441	11.648	0.000
"total"	2	2003	2006	20.957^	7.504	36.092	3.651	0.005
"total"	3	2006	2015	-6.495^	-7.501	-5.478	-14.043	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

"methadone" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"total"	Full Range	1999	2015	8.697^	6.063	11.396	6.664	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

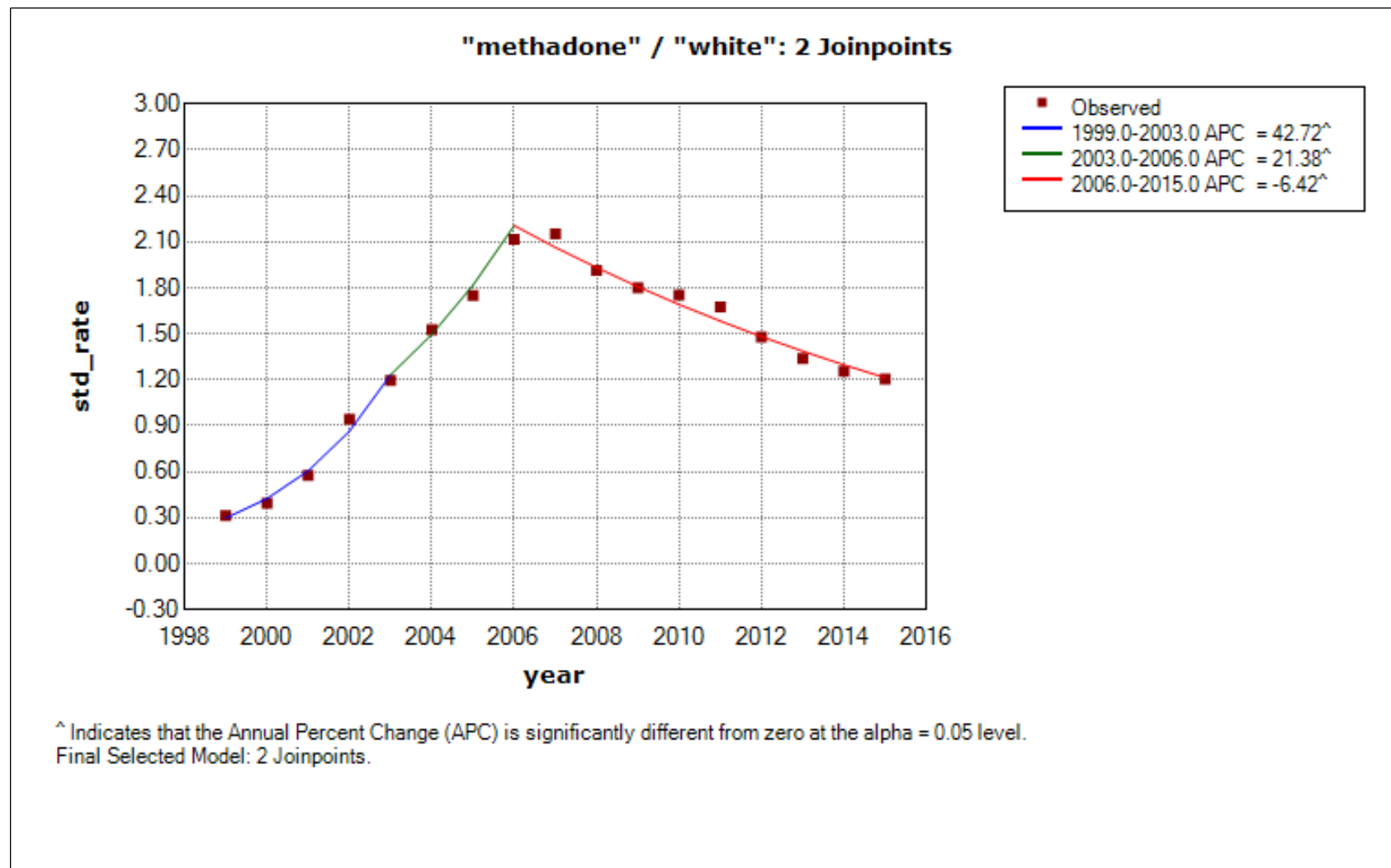
Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"total"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"total"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0019000	0.0250000
"total"	#3	2 Joinpoint(s) *	3 Joinpoint(s)	2	9	10000	0.2408000	0.0500000

Final Selected Model: "total" - 2 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test

"methadone" \ "white"
Number of Joinpoints: 2 (Final Selected Model)



"methadone" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	0.31301	0.01179	0.29727		42.71924 [^]
2000	0.39449	0.01312	0.42426		42.71924 [^]
2001	0.57592	0.01580	0.60551		42.71924 [^]
2002	0.94088	0.02018	0.86417		42.71924 [^]
2003	1.19661	0.02275	1.23334	Joinpoint 1	
2004	1.52632	0.02566	1.49709		21.38456 [^]
2005	1.75047	0.02741	1.81723		21.38456 [^]
2006	2.11589	0.03012	2.20584	Joinpoint 2	
2007	2.15226	0.03033	2.06425		- 6.41891 [^]
2008	1.91267	0.02856	1.93175		- 6.41891 [^]
2009	1.79908	0.02771	1.80775		- 6.41891 [^]
2010	1.75353	0.02735	1.69171		- 6.41891 [^]
2011	1.67652	0.02683	1.58312		- 6.41891 [^]
2012	1.47994	0.02518	1.48150		- 6.41891 [^]
2013	1.33968	0.02394	1.38641		- 6.41891 [^]
2014	1.25531	0.02315	1.29741		- 6.41891 [^]
2015	1.20371	0.02261	1.21413		- 6.41891 [^]

[^] Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"methadone" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"white"	2	17	6	11	78.36265	7.12388	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2003	2001	2005
"white"	2	2006	2005	2008

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-712.275681	57.217906	-12.448475	0.000001
"white"	Slope 1	0.355709	0.028595	12.439539	0.000001
"white"	Slope 2 - Slope 1	-0.161916	0.057975	-2.792844	0.020956
"white"	Slope 3 - Slope 2	-0.260135	0.050647	-5.136208	0.000614

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-712.275681	57.217906	-12.448475	0.000001
"white"	Intercept 2	-387.958662	101.093910	-3.837607	0.003981
"white"	Intercept 3	133.872781	9.367499	14.291198	0.000000
"white"	Slope 1	0.355709	0.028595	12.439539	0.000001
"white"	Slope 2	0.193794	0.050433	3.842625	0.003951
"white"	Slope 3	-0.066342	0.004659	-14.238790	0.000000

- The statistic could not be calculated.

"methadone" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	3273.888803	3273.888803	-1.636148	0.000000	0.000000	0.000000
"white"	Intercept 2	-1.636148	-1.636148	0.000818	0.000000	0.000000	0.000000
"white"	Intercept 3	0.000000	0.000000	0.000000	10219.978543	-5.098427	0.000000
"white"	Slope 1	0.000000	0.000000	0.000000	-5.098427	0.002543	0.000000
"white"	Slope 2	0.000000	0.000000	0.000000	0.000000	0.000000	87.750033
"white"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	-0.043645

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	1.000000	-1.000000	0.000000	0.000000	0.000000	0.000000
"white"	Intercept 2	-1.000000	1.000000	0.000000	0.000000	0.000000	0.000000
"white"	Intercept 3	0.000000	0.000000	1.000000	-1.000000	0.000000	0.000000
"white"	Slope 1	0.000000	0.000000	-1.000000	1.000000	0.000000	0.000000
"white"	Slope 2	0.000000	0.000000	0.000000	0.000000	1.000000	-0.999999
"white"	Slope 3	0.000000	0.000000	0.000000	0.000000	-0.999999	1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2003	2001	2005
"white"	2	2006	2005	2008

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"white"	1	1999	2003	42.719^	33.779	52.256	12.440	0.000
"white"	2	2003	2006	21.385^	8.297	36.054	3.843	0.004
"white"	3	2006	2015	-6.419^	-7.400	-5.427	-14.239	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

"methadone" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"white"	Full Range	1999	2015	9.193^	6.625	11.822	7.244	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

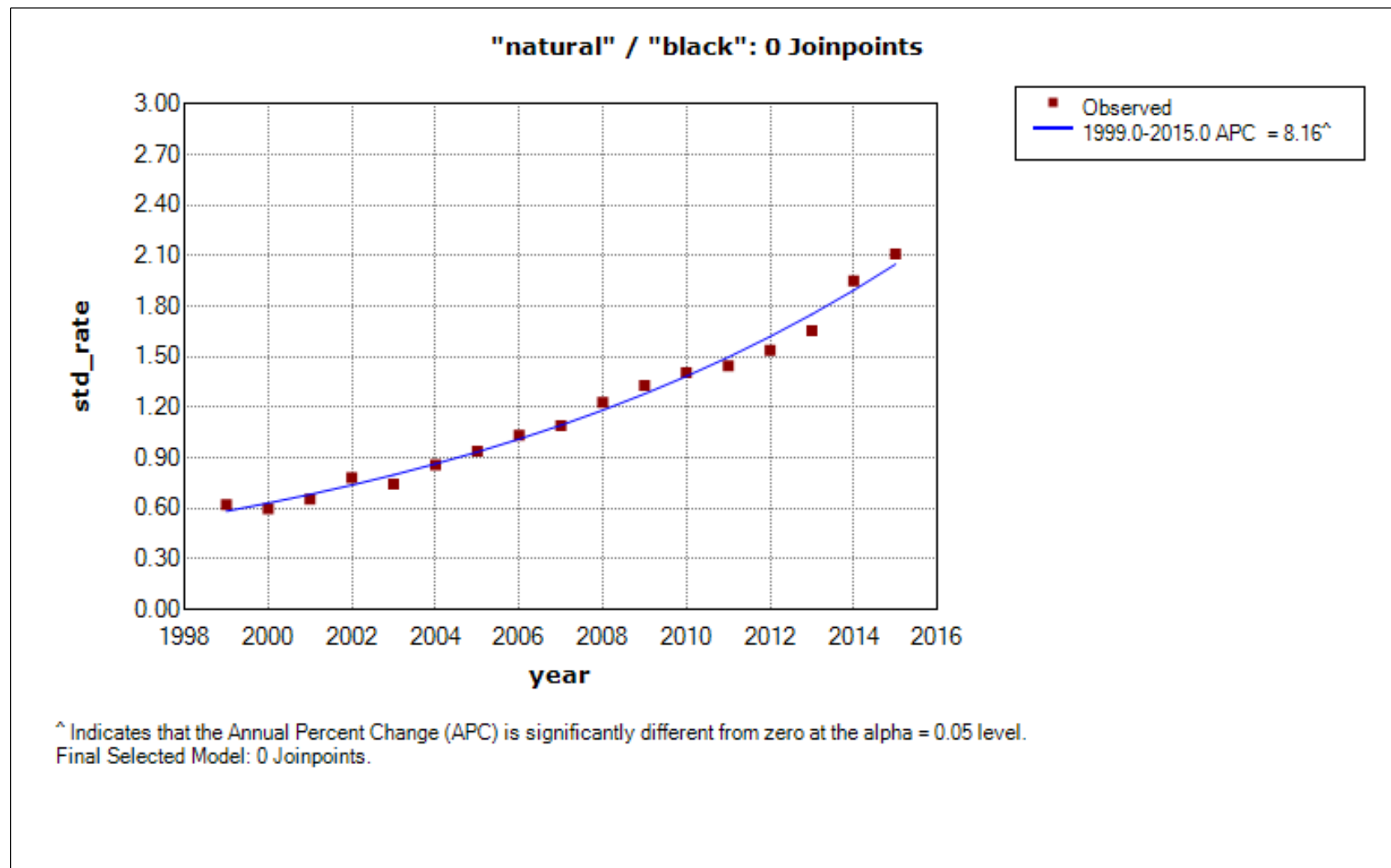
Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"white"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"white"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0012000	0.0250000
"white"	#3	2 Joinpoint(s) *	3 Joinpoint(s)	2	9	10000	0.1719000	0.0500000

Final Selected Model: "white" - 2 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test

"natural" \ "black"
Number of Joinpoints: 0 (Final Selected Model)



"natural" \ "black", Number of Joinpoints: 0 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	0.62230	0.04417	0.58398		8.16330^
2000	0.59762	0.04242	0.63165		8.16330^
2001	0.65532	0.04407	0.68322		8.16330^
2002	0.78190	0.04775	0.73899		8.16330^
2003	0.74506	0.04605	0.79932		8.16330^
2004	0.85726	0.04873	0.86457		8.16330^
2005	0.93910	0.05086	0.93515		8.16330^
2006	1.03502	0.05266	1.01148		8.16330^
2007	1.09213	0.05353	1.09405		8.16330^
2008	1.23064	0.05661	1.18337		8.16330^
2009	1.32862	0.05879	1.27997		8.16330^
2010	1.40669	0.05930	1.38446		8.16330^
2011	1.44508	0.05994	1.49747		8.16330^
2012	1.53900	0.06170	1.61972		8.16330^
2013	1.65453	0.06350	1.75194		8.16330^
2014	1.95101	0.06851	1.89495		8.16330^
2015	2.10980	0.07168	2.04965		8.16330^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"natural" \ "black", Number of Joinpoints: 0 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"black"	0	17	2	15	11.75447	0.78363	Uncorrelated

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	-157.403349	4.417873	-35.628763	0.000000
"black"	Slope 1	0.078472	0.002199	35.687489	0.000000

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	-157.403349	4.417873	-35.628763	0.000000
"black"	Slope 1	0.078472	0.002199	35.687489	0.000000

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	19.517602			19.517602		
"black"	Slope 1	-0.009714			-0.009714		

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	1.000000			-0.999997		
"black"	Slope 1	-0.999997			1.000000		

"natural" \ "black", Number of Joinpoints: 0 (Final Selected Model) continued...

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"black"	1	1999	2015	8.163^	7.658	8.671	35.687	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"black"	Full Range	1999	2015	8.163^	7.658	8.671	35.687	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

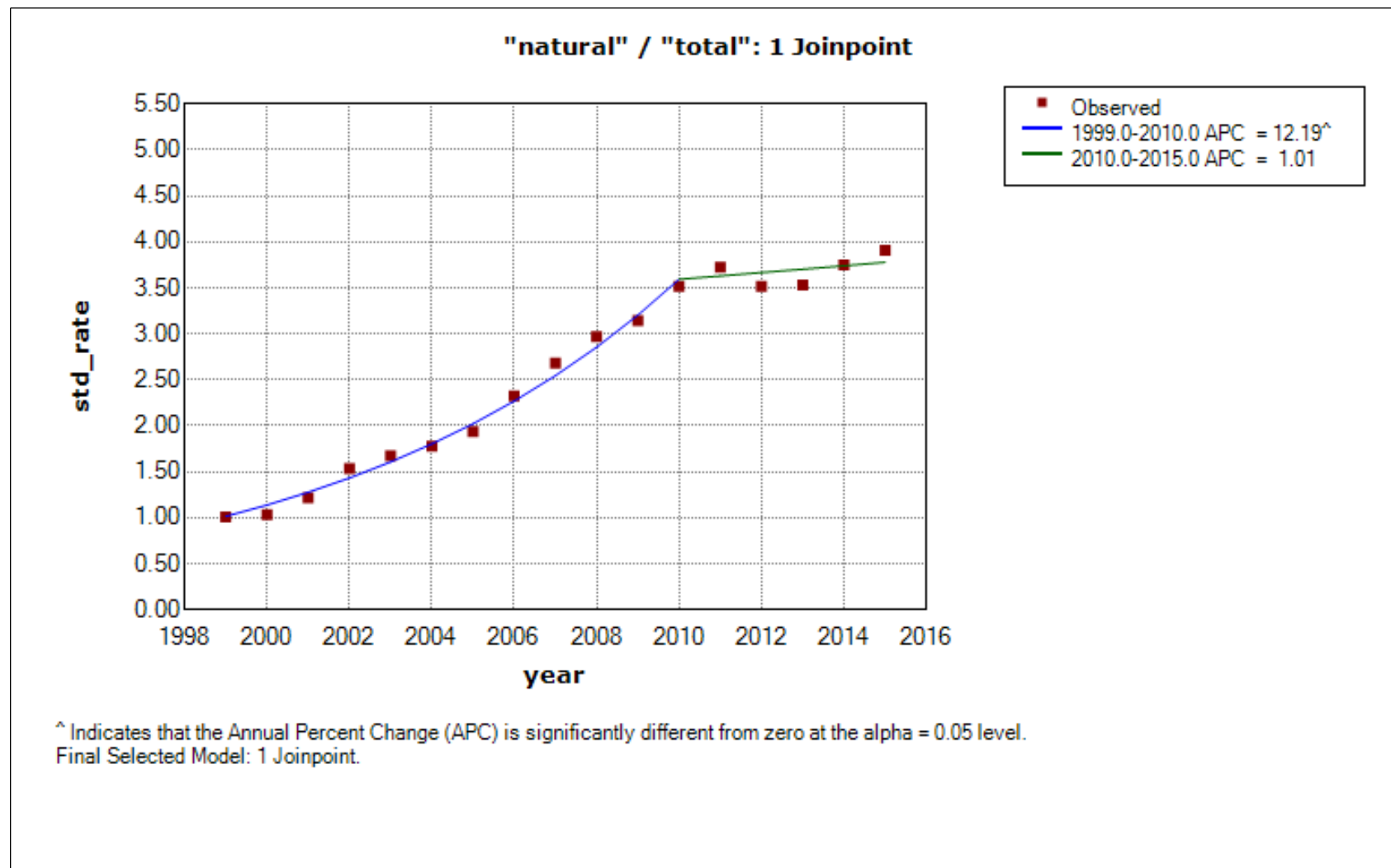
- The statistic could not be calculated.

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"black"	#1	0 Joinpoint(s) *	3 Joinpoint(s)	6	9	10000	0.0685000	0.0166667
"black"	#2	0 Joinpoint(s) *	2 Joinpoint(s)	4	11	10000	0.0632000	0.0166667
"black"	#3	0 Joinpoint(s) *	1 Joinpoint(s)	2	13	10000	0.2378000	0.0166667
Final Selected Model: "black" - 0 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"natural" \ "total"
Number of Joinpoints: 1 (Final Selected Model)



"natural" \ "total", Number of Joinpoints: 1 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	1.00560	0.01920	1.01400		12.18970 [^]
2000	1.03354	0.01915	1.13761		12.18970 [^]
2001	1.21754	0.02066	1.27628		12.18970 [^]
2002	1.53181	0.02307	1.43185		12.18970 [^]
2003	1.67171	0.02400	1.60639		12.18970 [^]
2004	1.77547	0.02462	1.80221		12.18970 [^]
2005	1.93767	0.02560	2.02189		12.18970 [^]
2006	2.32379	0.02790	2.26835		12.18970 [^]
2007	2.68293	0.02992	2.54486		12.18970 [^]
2008	2.97029	0.03138	2.85507		12.18970 [^]
2009	3.14300	0.03221	3.20310		12.18970 [^]
2010	3.51501	0.03404	3.59354	Joinpoint 1	
2011	3.72615	0.03498	3.62972		1.00662
2012	3.51802	0.03390	3.66625		1.00662
2013	3.52836	0.03376	3.70316		1.00662
2014	3.75018	0.03474	3.74044		1.00662
2015	3.90797	0.03544	3.77809		1.00662

[^] Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"natural" \ "total", Number of Joinpoints: 1 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"total"	1	17	4	13	188.80668	14.52359	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2010	2007	2011

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-229.913064	9.961835	-23.079390	0.000000
"total"	Slope 1	0.115021	0.004968	23.152836	0.000000
"total"	Slope 2 - Slope 1	-0.105005	0.011978	-8.766465	0.000001

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-229.913064	9.961835	-23.079390	0.000000
"total"	Intercept 2	-18.852730	21.940672	-0.859259	0.407035
"total"	Slope 1	0.115021	0.004968	23.152836	0.000000
"total"	Slope 2	0.010016	0.010899	0.918949	0.376224

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	99.238148	99.238148		-0.049489	0.000000	
"total"	Intercept 2	-0.049489	-0.049489		0.000025	0.000000	
"total"	Slope 1	0.000000	0.000000		0.000000	481.393092	

"natural" \ "total", Number of Joinpoints: 1 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Slope 2	0.000000	0.000000		0.000000	-0.239137	

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	1.000000	-0.999999		0.000000	0.000000	
"total"	Intercept 2	-0.999999	1.000000		0.000000	0.000000	
"total"	Slope 1	0.000000	0.000000		1.000000	-1.000000	
"total"	Slope 2	0.000000	0.000000		-1.000000	1.000000	

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2010	2007	2011

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"total"	1	1999	2010	12.190^	10.982	13.411	23.153	0.000
"total"	2	2010	2015	1.007	-1.364	3.434	0.919	0.376

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"total"	Full Range	1999	2015	8.568^	7.546	9.599	17.043	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

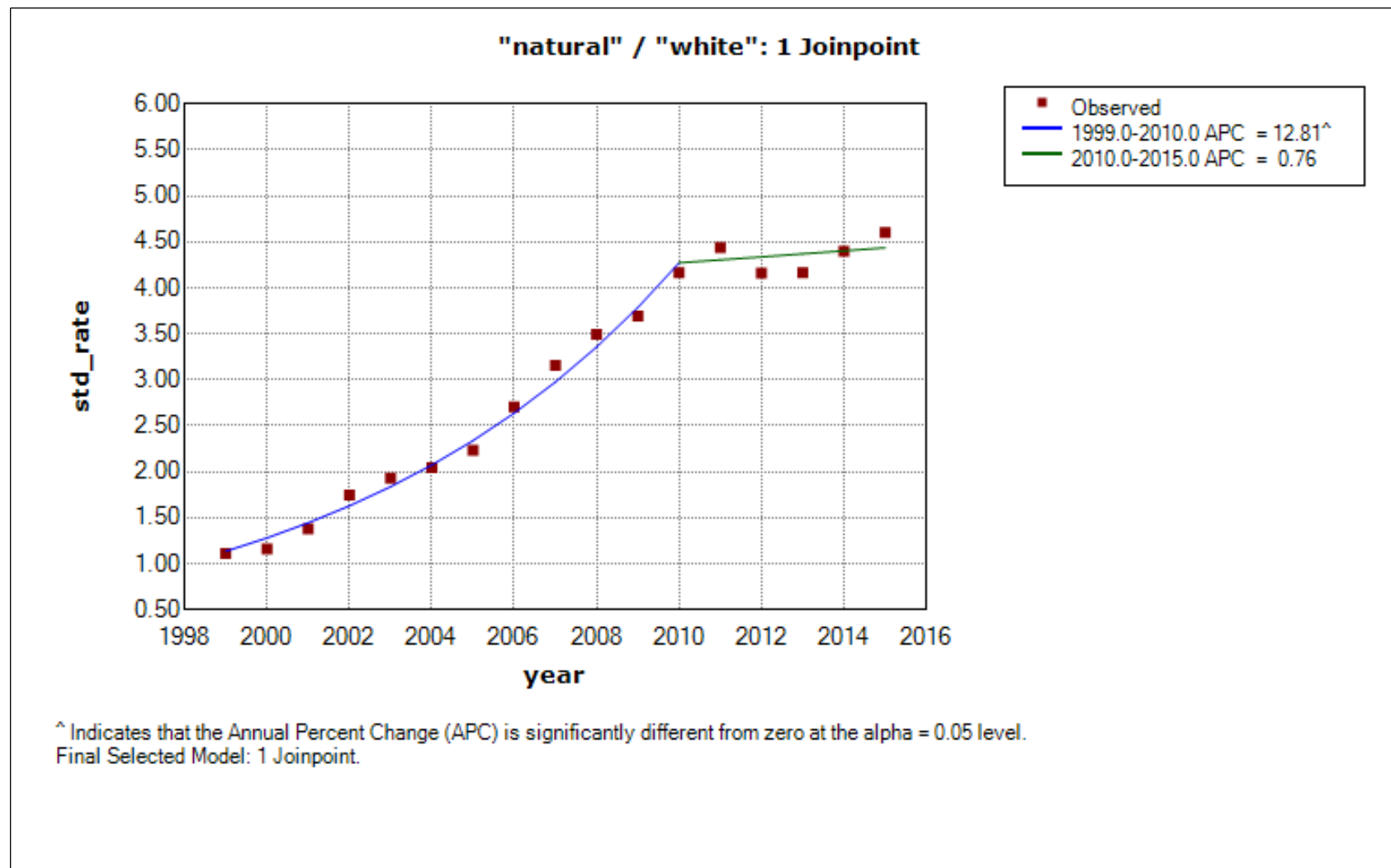
"natural" \ "total", Number of Joinpoints: 1 (Final Selected Model) continued...

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"total"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"total"	#2	1 Joinpoint(s) *	3 Joinpoint(s)	4	9	10000	0.2018000	0.0250000
"total"	#3	1 Joinpoint(s) *	2 Joinpoint(s)	2	11	10000	0.1823000	0.0250000
Final Selected Model: "total" - 1 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"natural" \ "white"
Number of Joinpoints: 1 (Final Selected Model)



"natural" \ "white", Number of Joinpoints: 1 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	1.10932	0.02217	1.13435		12.8103 2^
2000	1.16015	0.02247	1.27967		12.8103 2^
2001	1.38060	0.02443	1.44360		12.8103 2^
2002	1.74388	0.02739	1.62853		12.8103 2^
2003	1.93120	0.02877	1.83715		12.8103 2^
2004	2.04151	0.02950	2.07249		12.8103 2^
2005	2.23083	0.03076	2.33798		12.8103 2^
2006	2.70248	0.03379	2.63748		12.8103 2^
2007	3.15455	0.03652	2.97536		12.8103 2^
2008	3.49542	0.03841	3.35651		12.8103 2^
2009	3.69213	0.03945	3.78649		12.8103 2^
2010	4.16593	0.04202	4.27155	Joinpoint 1	
2011	4.43874	0.04335	4.30405		0.76101
2012	4.15771	0.04191	4.33681		0.76101
2013	4.16434	0.04177	4.36981		0.76101
2014	4.39779	0.04293	4.40307		0.76101
2015	4.60101	0.04396	4.43657		0.76101

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"natural" \ "white", Number of Joinpoints: 1 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"white"	1	17	4	13	195.82764	15.06366	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2010	2007	2011

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-240.828592	10.665179	-22.580829	0.000000
"white"	Slope 1	0.120538	0.005319	22.663243	0.000000
"white"	Slope 2 - Slope 1	-0.112956	0.012868	-8.778221	0.000001

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-240.828592	10.665179	-22.580829	0.000000
"white"	Intercept 2	-13.786363	23.587040	-0.584489	0.569717
"white"	Slope 1	0.120538	0.005319	22.663243	0.000000
"white"	Slope 2	0.007581	0.011717	0.647021	0.529801

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	113.746052	113.746052		-0.056724	0.000000	
"white"	Intercept 2	-0.056724	-0.056724		0.000028	0.000000	
"white"	Slope 1	0.000000	0.000000		0.000000	556.348443	

"natural" \ "white", Number of Joinpoints: 1 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Slope 2	0.000000	0.000000		0.000000	-0.276373	

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	1.000000	-0.999999		0.000000	0.000000	
"white"	Intercept 2	-0.999999	1.000000		0.000000	0.000000	
"white"	Slope 1	0.000000	0.000000		1.000000	-1.000000	
"white"	Slope 2	0.000000	0.000000		-1.000000	1.000000	

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2010	2007	2011

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"white"	1	1999	2010	12.810^	11.511	14.125	22.663	0.000
"white"	2	2010	2015	0.761	-1.779	3.367	0.647	0.530

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"white"	Full Range	1999	2015	8.898^	7.799	10.008	16.472	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

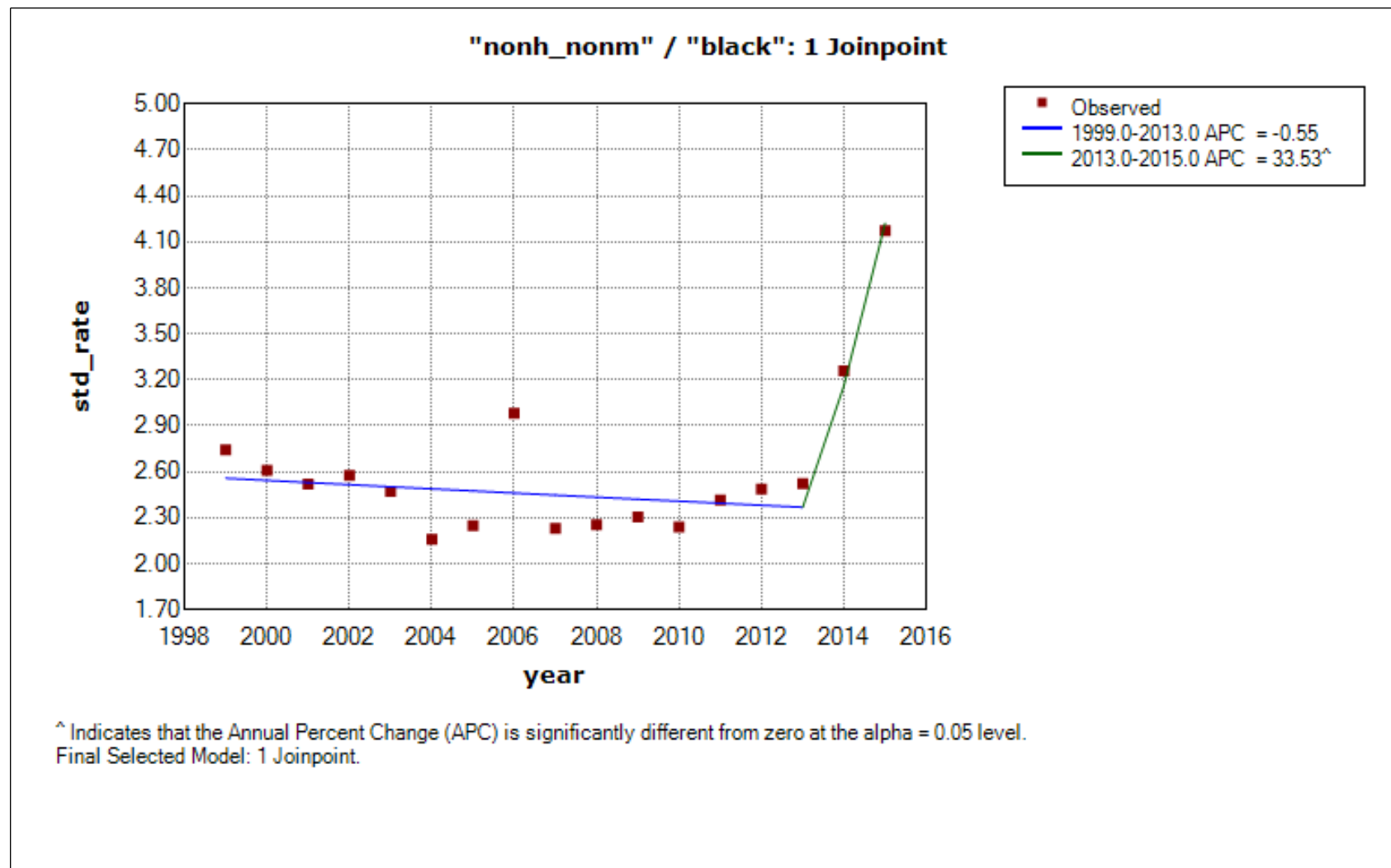
"natural" \ "white", Number of Joinpoints: 1 (Final Selected Model) continued...

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"white"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"white"	#2	1 Joinpoint(s) *	3 Joinpoint(s)	4	9	10000	0.2189000	0.0250000
"white"	#3	1 Joinpoint(s) *	2 Joinpoint(s)	2	11	10000	0.2281000	0.0250000
Final Selected Model: "white" - 1 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"nonh_nonm" \ "black"
Number of Joinpoints: 1 (Final Selected Model)



"nonh_nonm" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	2.74200	0.09196	2.55737		-0.54805
2000	2.60930	0.08838	2.54336		-0.54805
2001	2.52000	0.08610	2.52942		-0.54805
2002	2.57527	0.08631	2.51556		-0.54805
2003	2.47011	0.08383	2.50177		-0.54805
2004	2.15844	0.07769	2.48806		-0.54805
2005	2.24853	0.07869	2.47442		-0.54805
2006	2.98226	0.08975	2.46086		-0.54805
2007	2.23012	0.07677	2.44738		-0.54805
2008	2.25251	0.07671	2.43396		-0.54805
2009	2.30383	0.07734	2.42062		-0.54805
2010	2.23910	0.07517	2.40736		-0.54805
2011	2.41614	0.07771	2.39416		-0.54805
2012	2.48771	0.07829	2.38104		-0.54805
2013	2.52113	0.07833	2.36799	Joinpoint 1	
2014	3.25857	0.08893	3.16208		33.53435^
2015	4.17362	0.10023	4.22247		33.53435^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"nonh_nonm" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"black"	1	17	4	13	96.21551	7.40119	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2013	2010	2013

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	11.924578	11.934948	0.999131	0.337453
"black"	Slope 1	-0.005496	0.005951	-0.923513	0.373937
"black"	Slope 2 - Slope 1	0.294684	0.098753	2.984065	0.011399

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	11.924578	11.934948	0.999131	0.337453
"black"	Intercept 2	-581.274598	198.581833	-2.927129	0.012671
"black"	Slope 1	-0.005496	0.005951	-0.923513	0.373937
"black"	Slope 2	0.289189	0.098573	2.933747	0.012517

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	142.442978	142.442978		-0.071021	0.000000	
"black"	Intercept 2	-0.071021	-0.071021		0.000035	0.000000	
"black"	Slope 1	0.000000	0.000000		0.000000	39434.744440	

"nonh_nonm" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Slope 2	0.000000	0.000000		0.000000	-19.574831	

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	1.000000	-0.999998		0.000000	0.000000	
"black"	Intercept 2	-0.999998	1.000000		0.000000	0.000000	
"black"	Slope 1	0.000000	0.000000		1.000000	-1.000000	
"black"	Slope 2	0.000000	0.000000		-1.000000	1.000000	

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2013	2010	2013

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"black"	1	1999	2013	-0.548	-1.829	0.750	-0.924	0.374
"black"	2	2013	2015	33.534^	7.726	65.526	2.934	0.013

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"black"	Full Range	1999	2015	3.184^	0.514	5.925	2.343	0.019

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

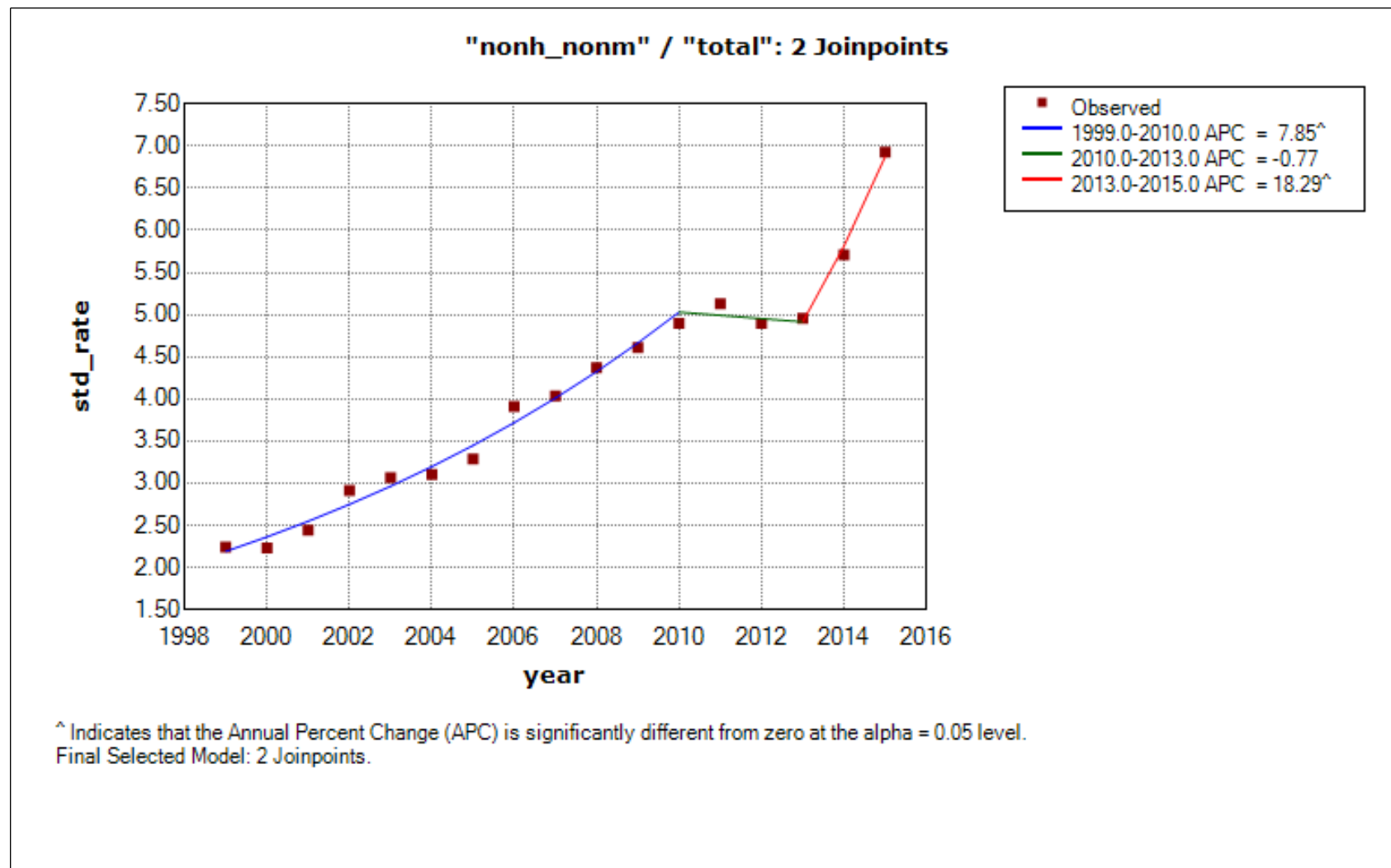
"nonh_nonm" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"black"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0011000	0.0166667
"black"	#2	1 Joinpoint(s) *	3 Joinpoint(s)	4	9	10000	0.5680000	0.0250000
"black"	#3	1 Joinpoint(s) *	2 Joinpoint(s)	2	11	10000	0.2961000	0.0250000
Final Selected Model: "black" - 1 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"nonh_nonm" \ "total"
Number of Joinpoints: 2 (Final Selected Model)



"nonh_nonm" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	2.24326	0.02866	2.19120		7.84709^
2000	2.22927	0.02812	2.36315		7.84709^
2001	2.44105	0.02926	2.54859		7.84709^
2002	2.91569	0.03185	2.74858		7.84709^
2003	3.06520	0.03254	2.96426		7.84709^
2004	3.10139	0.03259	3.19687		7.84709^
2005	3.28865	0.03339	3.44773		7.84709^
2006	3.91280	0.03627	3.71827		7.84709^
2007	4.03241	0.03672	4.01005		7.84709^
2008	4.36927	0.03810	4.32472		7.84709^
2009	4.61195	0.03903	4.66409		7.84709^
2010	4.89757	0.04020	5.03008	Joinpoint 1	
2011	5.12721	0.04106	4.99138		-0.76955
2012	4.89667	0.04001	4.95296		-0.76955
2013	4.95698	0.04006	4.91485	Joinpoint 2	
2014	5.71160	0.04300	5.81356		18.28563^
2015	6.92706	0.04740	6.87661		18.28563^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"nonh_nonm" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"total"	2	17	6	11	172.15022	15.65002	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2010	2007	2010
"total"	2	2013	2012	2013

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-150.228505	7.861956	-19.108287	0.000000
"total"	Slope 1	0.075544	0.003921	19.264211	0.000000
"total"	Slope 2 - Slope 1	-0.083270	0.045216	-1.841606	0.098659
"total"	Slope 3 - Slope 2	0.175657	0.060278	2.914144	0.017195

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-150.228505	7.861956	-19.108287	0.000000
"total"	Intercept 2	17.143242	90.608232	0.189202	0.854133
"total"	Intercept 3	-336.455008	80.690005	-4.169723	0.002413
"total"	Slope 1	0.075544	0.003921	19.264211	0.000000
"total"	Slope 2	-0.007725	0.045045	-0.171500	0.867625
"total"	Slope 3	0.167932	0.040054	4.192677	0.002332

- The statistic could not be calculated.

"nonh_nonm" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	61.810345	61.810345	-0.030830	0.000000	0.000000	0.000000
"total"	Intercept 2	-0.030830	-0.030830	0.000015	0.000000	0.000000	0.000000
"total"	Intercept 3	0.000000	0.000000	0.000000	8209.851725	-4.081478	0.000000
"total"	Slope 1	0.000000	0.000000	0.000000	-4.081478	0.002029	0.000000
"total"	Slope 2	0.000000	0.000000	0.000000	0.000000	0.000000	6510.876849
"total"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	-3.231930

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	1.000000	-0.999999	0.000000	0.000000	0.000000	0.000000
"total"	Intercept 2	-0.999999	1.000000	0.000000	0.000000	0.000000	0.000000
"total"	Intercept 3	0.000000	0.000000	1.000000	-1.000000	0.000000	0.000000
"total"	Slope 1	0.000000	0.000000	-1.000000	1.000000	0.000000	0.000000
"total"	Slope 2	0.000000	0.000000	0.000000	0.000000	1.000000	-1.000000
"total"	Slope 3	0.000000	0.000000	0.000000	0.000000	-1.000000	1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2010	2007	2010
"total"	2	2013	2012	2013

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"total"	1	1999	2010	7.847^	6.895	8.808	19.264	0.000
"total"	2	2010	2013	-0.770	-10.383	9.875	-0.172	0.868
"total"	3	2013	2015	18.286^	8.039	29.504	4.193	0.002

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

"nonh_nonm" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"total"	Full Range	1999	2015	7.410^	5.287	9.575	7.020	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

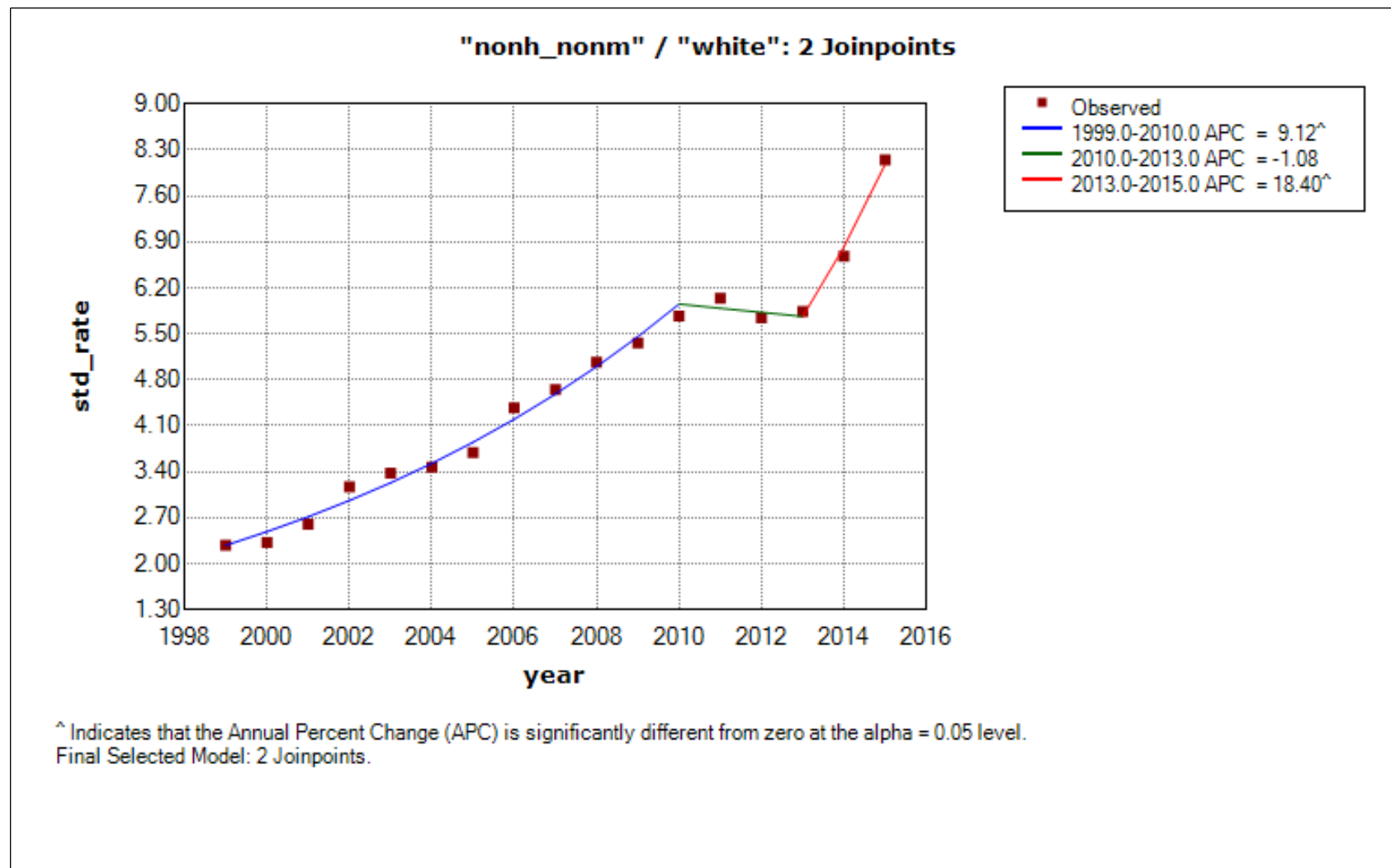
Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"total"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0022000	0.0166667
"total"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0016000	0.0250000
"total"	#3	2 Joinpoint(s) *	3 Joinpoint(s)	2	9	10000	0.7921000	0.0500000

Final Selected Model: "total" - 2 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test

"nonh_nonm" \ "white"
Number of Joinpoints: 2 (Final Selected Model)



"nonh_nonm" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	2.27817	0.03179	2.27876		9.12404^
2000	2.31806	0.03178	2.48668		9.12404^
2001	2.59823	0.03353	2.71357		9.12404^
2002	3.16716	0.03695	2.96115		9.12404^
2003	3.37814	0.03811	3.23133		9.12404^
2004	3.47113	0.03854	3.52616		9.12404^
2005	3.68990	0.03962	3.84789		9.12404^
2006	4.37486	0.04309	4.19897		9.12404^
2007	4.65009	0.04441	4.58208		9.12404^
2008	5.07006	0.04631	5.00016		9.12404^
2009	5.35978	0.04756	5.45637		9.12404^
2010	5.77353	0.04951	5.95421	Joinpoint 1	
2011	6.04375	0.05065	5.89000		-1.07842
2012	5.74170	0.04933	5.82648		-1.07842
2013	5.83799	0.04957	5.76365	Joinpoint 2	
2014	6.68098	0.05313	6.82414		18.39972^
2015	8.15091	0.05895	8.07977		18.39972^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"nonh_nonm" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"white"	2	17	6	11	165.78792	15.07163	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2010	2007	2010
"white"	2	2013	2012	2013

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-173.719196	8.020617	-21.659080	0.000000
"white"	Slope 1	0.087315	0.004000	21.826154	0.000000
"white"	Slope 2 - Slope 1	-0.098158	0.045323	-2.165752	0.058517
"white"	Slope 3 - Slope 2	0.179739	0.060605	2.965738	0.015811

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-173.719196	8.020617	-21.659080	0.000000
"white"	Intercept 2	23.577996	90.810285	0.259640	0.800983
"white"	Intercept 3	-338.236388	81.454336	-4.152466	0.002475
"white"	Slope 1	0.087315	0.004000	21.826154	0.000000
"white"	Slope 2	-0.010843	0.045146	-0.240171	0.815579
"white"	Slope 3	0.168896	0.040433	4.177179	0.002386

- The statistic could not be calculated.

"nonh_nonm" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	64.330304	64.330304	-0.032086	0.000000	0.000000	0.000000
"white"	Intercept 2	-0.032086	-0.032086	0.000016	0.000000	0.000000	0.000000
"white"	Intercept 3	0.000000	0.000000	0.000000	8246.507922	-4.099706	0.000000
"white"	Slope 1	0.000000	0.000000	0.000000	-4.099706	0.002038	0.000000
"white"	Slope 2	0.000000	0.000000	0.000000	0.000000	0.000000	6634.808867
"white"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	-3.293449

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	1.000000	-0.999999	0.000000	0.000000	0.000000	0.000000
"white"	Intercept 2	-0.999999	1.000000	0.000000	0.000000	0.000000	0.000000
"white"	Intercept 3	0.000000	0.000000	1.000000	-1.000000	0.000000	0.000000
"white"	Slope 1	0.000000	0.000000	-1.000000	1.000000	0.000000	0.000000
"white"	Slope 2	0.000000	0.000000	0.000000	0.000000	1.000000	-1.000000
"white"	Slope 3	0.000000	0.000000	0.000000	0.000000	-1.000000	1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2010	2007	2010
"white"	2	2013	2012	2013

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"white"	1	1999	2010	9.124^	8.141	10.116	21.826	0.000
"white"	2	2010	2013	-1.078	-10.682	9.558	-0.240	0.816
"white"	3	2013	2015	18.400^	8.051	29.740	4.177	0.002

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

"nonh_nonm" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"white"	Full Range	1999	2015	8.232^	6.083	10.425	7.729	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

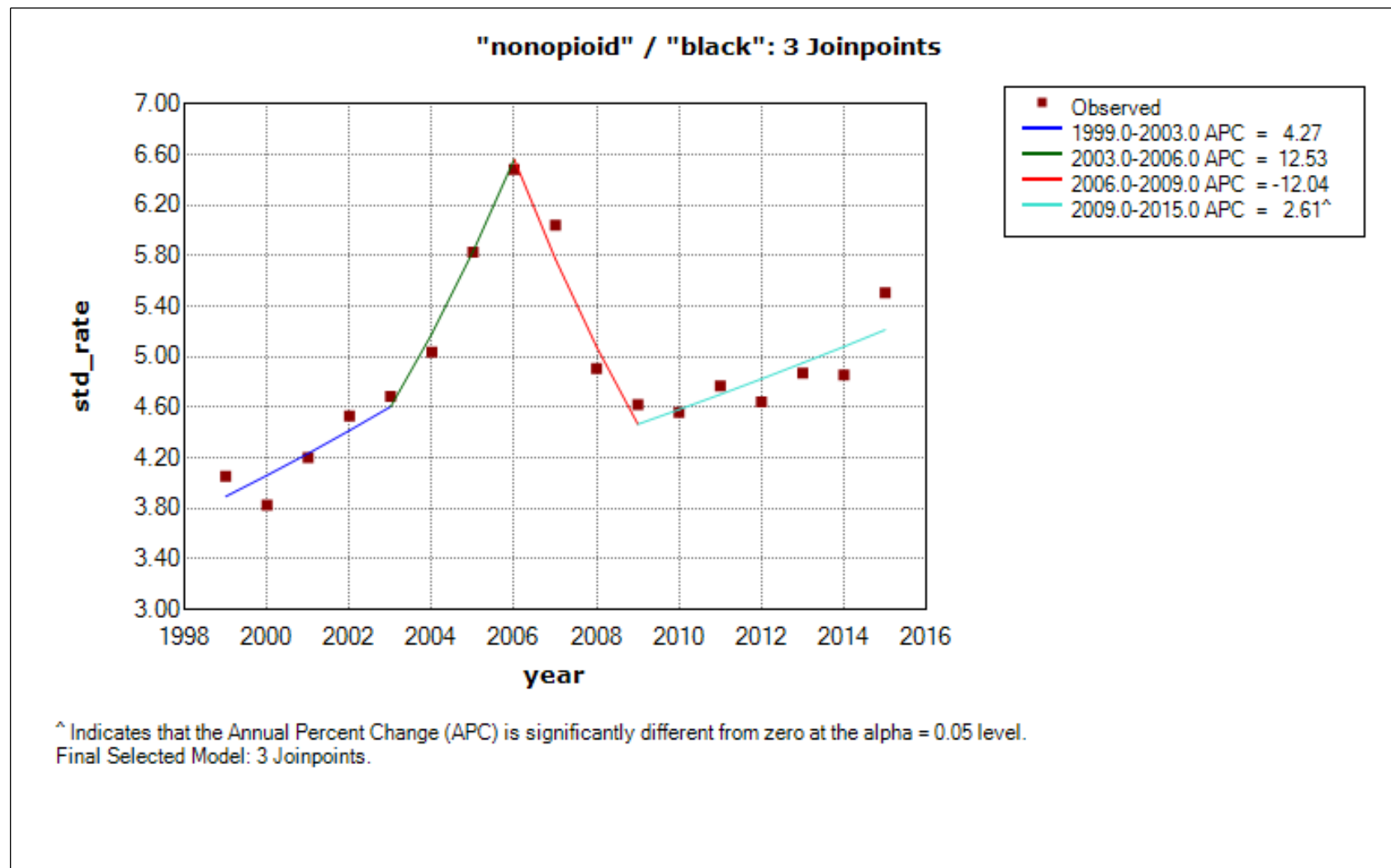
Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"white"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0005000	0.0166667
"white"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0012000	0.0250000
"white"	#3	2 Joinpoint(s) *	3 Joinpoint(s)	2	9	10000	0.3224000	0.0500000

Final Selected Model: "white" - 2 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test

"nonopioid" \ "black"
Number of Joinpoints: 3 (Final Selected Model)



"nonopioid" \ "black", Number of Joinpoints: 3 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	4.05272	0.11313	3.89517		4.27486
2000	3.82677	0.10865	4.06168		4.27486
2001	4.20327	0.11259	4.23531		4.27486
2002	4.53018	0.11521	4.41636		4.27486
2003	4.68722	0.11661	4.60516	Joinpoint 1	
2004	5.03569	0.11967	5.18228		12.53215
2005	5.82841	0.12705	5.83173		12.53215
2006	6.48334	0.13313	6.56257	Joinpoint 2	
2007	6.03944	0.12741	5.77257		-12.03810
2008	4.90625	0.11415	5.07766		-12.03810
2009	4.62020	0.10967	4.46640	Joinpoint 3	
2010	4.56122	0.10825	4.58295		2.60939^
2011	4.76781	0.10995	4.70254		2.60939^
2012	4.64123	0.10783	4.82524		2.60939^
2013	4.86973	0.10944	4.95115		2.60939^
2014	4.85747	0.10873	5.08035		2.60939^
2015	5.50617	0.11508	5.21291		2.60939^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"nonopioid" \ "black", Number of Joinpoints: 3 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"black"	3	17	8	9	33.23338	3.69260	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2003	2001	2007
"black"	2	2006	2005	2010
"black"	3	2009	2008	2013

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	-82.318568	44.626433	-1.844615	0.114643
"black"	Slope 1	0.041860	0.022307	1.876572	0.109675
"black"	Slope 2 - Slope 1	0.076209	0.064122	1.188500	0.279540
"black"	Slope 3 - Slope 2	-0.246335	0.083917	-2.935458	0.026101
"black"	Slope 4 - Slope 3	0.154026	0.059394	2.593272	0.041031

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	-82.318568	44.626433	-1.844615	0.114643
"black"	Intercept 2	-234.964655	120.506479	-1.949809	0.099085
"black"	Intercept 3	259.183927	117.535796	2.205149	0.069607
"black"	Intercept 4	-50.253775	20.087673	-2.501722	0.046420
"black"	Slope 1	0.041860	0.022307	1.876572	0.109675
"black"	Slope 2	0.118069	0.060117	1.963994	0.097156
"black"	Slope 3	-0.128266	0.058550	-2.190726	0.071004

"nonopioid" \ "black", Number of Joinpoints: 3 (Final Selected Model) continued...

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Slope 4	0.025759	0.009981	2.580880	0.041720

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	1991.518501	1991.518501	-0.995467	0.000000	0.000000	0.000000
"black"	Intercept 2	-0.995467	-0.995467	0.000498	0.000000	0.000000	0.000000
"black"	Intercept 3	0.000000	0.000000	0.000000	-7.244449	0.000000	0.000000
"black"	Intercept 4	0.000000	0.000000	0.000000	0.003614	0.000000	0.000000
"black"	Slope 1	0.000000	0.000000	0.000000	0.000000	13814.663435	-6.881693
"black"	Slope 2	0.000000	0.000000	0.000000	0.000000	-6.881693	0.003428
"black"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
"black"	Slope 4	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	1.000000	-1.000000	0.000000	0.000000	0.000000	0.000000
"black"	Intercept 2	-1.000000	1.000000	0.000000	0.000000	0.000000	0.000000
"black"	Intercept 3	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000
"black"	Intercept 4	0.000000	0.000000	-1.000000	0.000000	0.000000	0.000000
"black"	Slope 1	0.000000	0.000000	0.000000	1.000000	-1.000000	0.000000
"black"	Slope 2	0.000000	0.000000	0.000000	-1.000000	1.000000	0.000000
"black"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000
"black"	Slope 4	0.000000	0.000000	0.000000	0.000000	0.000000	-1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2003	2001	2007
"black"	2	2006	2005	2010

"nonopioid" \ "black", Number of Joinpoints: 3 (Final Selected Model) continued...

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	3	2009	2008	2013

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"black"	1	1999	2003	4.275	-1.264	10.125	1.877	0.110
"black"	2	2003	2006	12.532	-2.861	30.365	1.964	0.097
"black"	3	2006	2009	-12.038	-23.779	1.511	-2.191	0.071
"black"	4	2009	2015	2.609^	0.134	5.146	2.581	0.042

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"black"	Full Range	1999	2015	1.838	-1.520	5.311	1.065	0.287

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

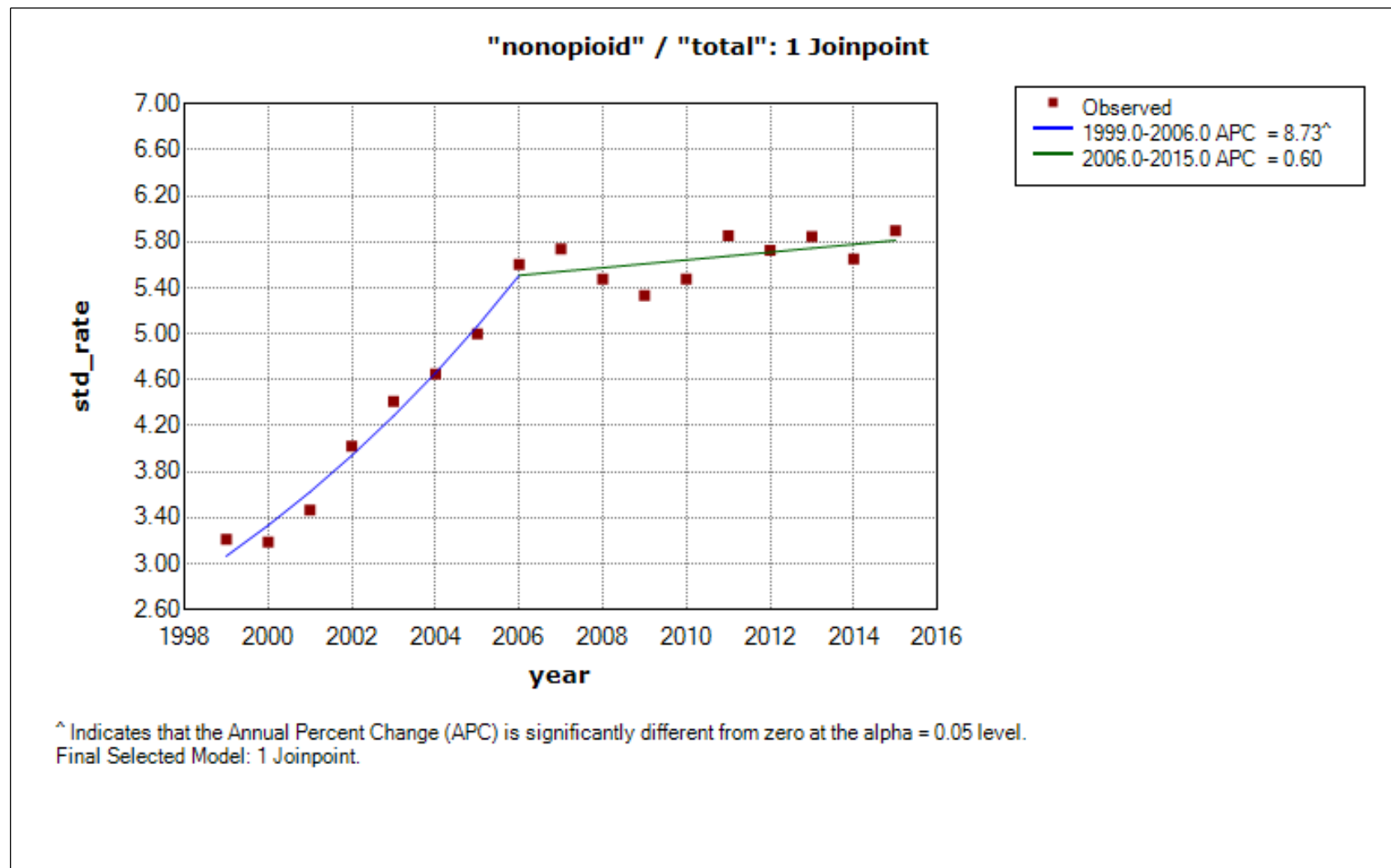
Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"black"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"black"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0001000	0.0250000
"black"	#3	2 Joinpoint(s)	3 Joinpoint(s) *	2	9	10000	0.0267000	0.0500000

Final Selected Model: "black" - 3 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test

"nonopioid" \ "total"
Number of Joinpoints: 1 (Final Selected Model)



"nonopioid" \ "total", Number of Joinpoints: 1 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	3.20938	0.03431	3.06547		8.73443^
2000	3.18801	0.03364	3.33322		8.73443^
2001	3.46634	0.03489	3.62435		8.73443^
2002	4.02009	0.03740	3.94092		8.73443^
2003	4.41147	0.03903	4.28514		8.73443^
2004	4.65078	0.03992	4.65942		8.73443^
2005	5.00085	0.04119	5.06639		8.73443^
2006	5.60484	0.04342	5.50892	Joinpoint 1	
2007	5.73814	0.04372	5.54197		0.59997
2008	5.47788	0.04261	5.57522		0.59997
2009	5.33210	0.04191	5.60867		0.59997
2010	5.47453	0.04230	5.64232		0.59997
2011	5.85391	0.04368	5.67617		0.59997
2012	5.72637	0.04304	5.71022		0.59997
2013	5.84379	0.04333	5.74448		0.59997
2014	5.64962	0.04255	5.77895		0.59997
2015	5.89836	0.04342	5.81362		0.59997

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"nonopioid" \ "total", Number of Joinpoints: 1 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"total"	1	17	4	13	196.80579	15.13891	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2006	2005	2007

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-166.272693	14.241143	-11.675516	0.000000
"total"	Slope 1	0.083738	0.007112	11.774025	0.000000
"total"	Slope 2 - Slope 1	-0.077757	0.008104	-9.594878	0.000001

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-166.272693	14.241143	-11.675516	0.000000
"total"	Intercept 2	-10.293079	7.812730	-1.317475	0.212280
"total"	Slope 1	0.083738	0.007112	11.774025	0.000000
"total"	Slope 2	0.005982	0.003885	1.539778	0.149559

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	202.810148	202.810148		-0.101285	0.000000	
"total"	Intercept 2	-0.101285	-0.101285		0.000051	0.000000	
"total"	Slope 1	0.000000	0.000000		0.000000	61.038752	

"nonopioid" \ "total", Number of Joinpoints: 1 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Slope 2	0.000000	0.000000		0.000000	-0.030351	

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	1.000000	-1.000000		0.000000	0.000000	
"total"	Intercept 2	-1.000000	1.000000		0.000000	0.000000	
"total"	Slope 1	0.000000	0.000000		1.000000	-0.999999	
"total"	Slope 2	0.000000	0.000000		-0.999999	1.000000	

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2006	2005	2007

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"total"	1	1999	2006	8.734^	7.062	10.433	11.774	0.000
"total"	2	2006	2015	0.600	-0.248	1.455	1.540	0.150

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"total"	Full Range	1999	2015	4.081^	3.308	4.860	10.520	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

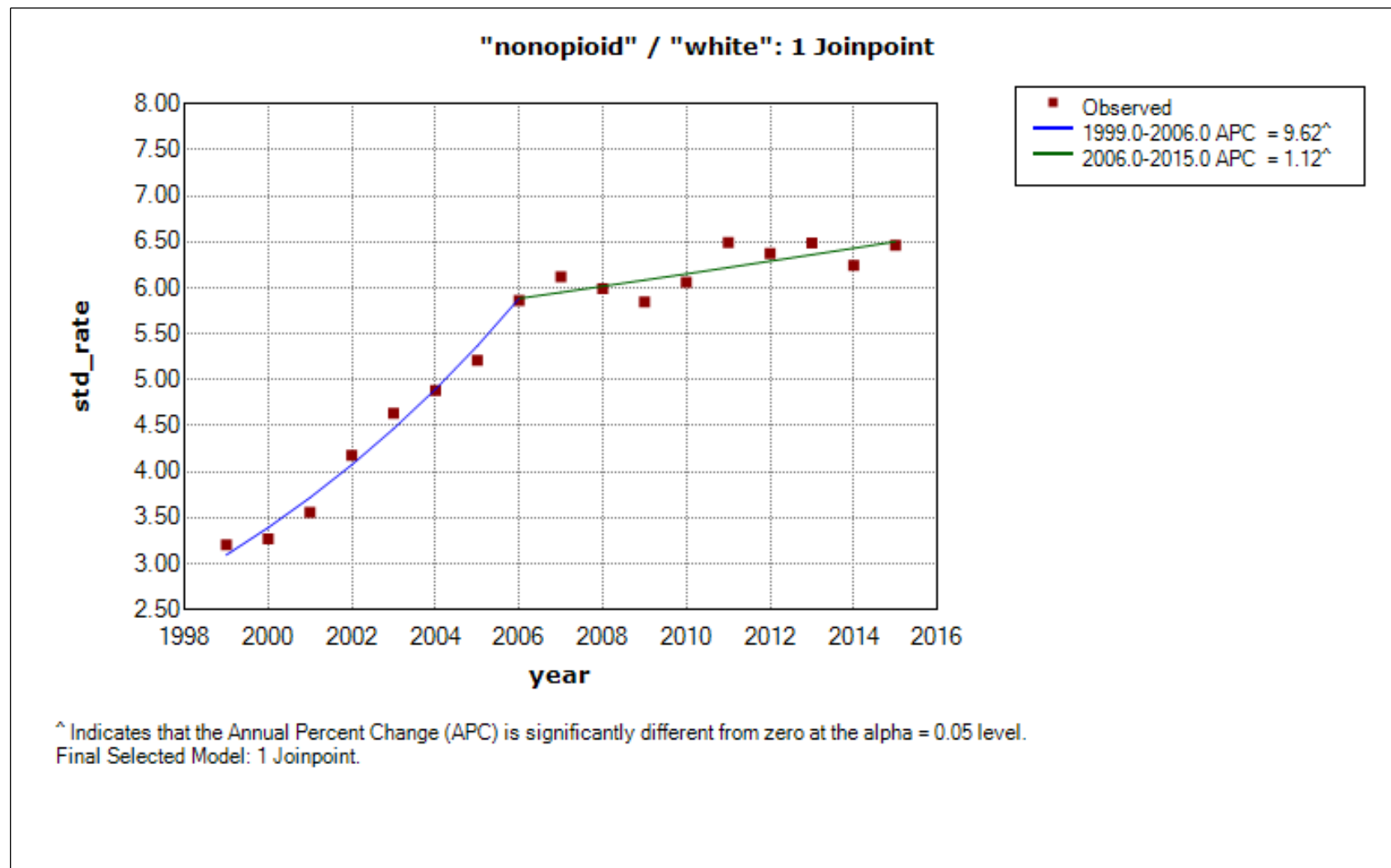
"nonopioid" \ "total", Number of Joinpoints: 1 (Final Selected Model) continued...

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"total"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"total"	#2	1 Joinpoint(s) *	3 Joinpoint(s)	4	9	10000	0.5240000	0.0250000
"total"	#3	1 Joinpoint(s) *	2 Joinpoint(s)	2	11	10000	0.5446000	0.0250000
Final Selected Model: "total" - 1 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"nonopioid" \ "white"
Number of Joinpoints: 1 (Final Selected Model)



"nonopioid" \ "white", Number of Joinpoints: 1 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	3.20214	0.03759	3.09405		9.61965^
2000	3.26959	0.03765	3.39168		9.61965^
2001	3.55605	0.03915	3.71795		9.61965^
2002	4.17839	0.04233	4.07560		9.61965^
2003	4.63632	0.04453	4.46766		9.61965^
2004	4.88457	0.04564	4.89744		9.61965^
2005	5.21212	0.04703	5.36855		9.61965^
2006	5.86087	0.04979	5.88499	Joinpoint 1	
2007	6.11946	0.05076	5.95067		1.11606^
2008	5.98910	0.05017	6.01708		1.11606^
2009	5.84821	0.04952	6.08424		1.11606^
2010	6.05938	0.05035	6.15214		1.11606^
2011	6.49208	0.05214	6.22080		1.11606^
2012	6.37363	0.05158	6.29023		1.11606^
2013	6.48802	0.05195	6.36043		1.11606^
2014	6.24551	0.05102	6.43142		1.11606^
2015	6.46104	0.05198	6.50320		1.11606^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"nonopioid" \ "white", Number of Joinpoints: 1 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"white"	1	17	4	13	154.48162	11.88320	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2006	2005	2008

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-182.471557	13.916750	-13.111650	0.000000
"white"	Slope 1	0.091846	0.006950	13.215112	0.000000
"white"	Slope 2 - Slope 1	-0.080748	0.007905	-10.215328	0.000000

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-182.471557	13.916750	-13.111650	0.000000
"white"	Intercept 2	-20.491757	7.572456	-2.706091	0.019093
"white"	Slope 1	0.091846	0.006950	13.215112	0.000000
"white"	Slope 2	0.011099	0.003765	2.947590	0.012199

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	193.675934	193.675934		-0.096723	0.000000	
"white"	Intercept 2	-0.096723	-0.096723		0.000048	0.000000	
"white"	Slope 1	0.000000	0.000000		0.000000	57.342092	

"nonopioid" \ "white", Number of Joinpoints: 1 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Slope 2	0.000000	0.000000		0.000000	-0.028513	

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	1.000000	-1.000000		0.000000	0.000000	
"white"	Intercept 2	-1.000000	1.000000		0.000000	0.000000	
"white"	Slope 1	0.000000	0.000000		1.000000	-0.999999	
"white"	Slope 2	0.000000	0.000000		-0.999999	1.000000	

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2006	2005	2008

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"white"	1	1999	2006	9.620^	7.972	11.292	13.215	0.000
"white"	2	2006	2015	1.116^	0.290	1.949	2.948	0.012

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"white"	Full Range	1999	2015	4.752^	3.994	5.516	12.528	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

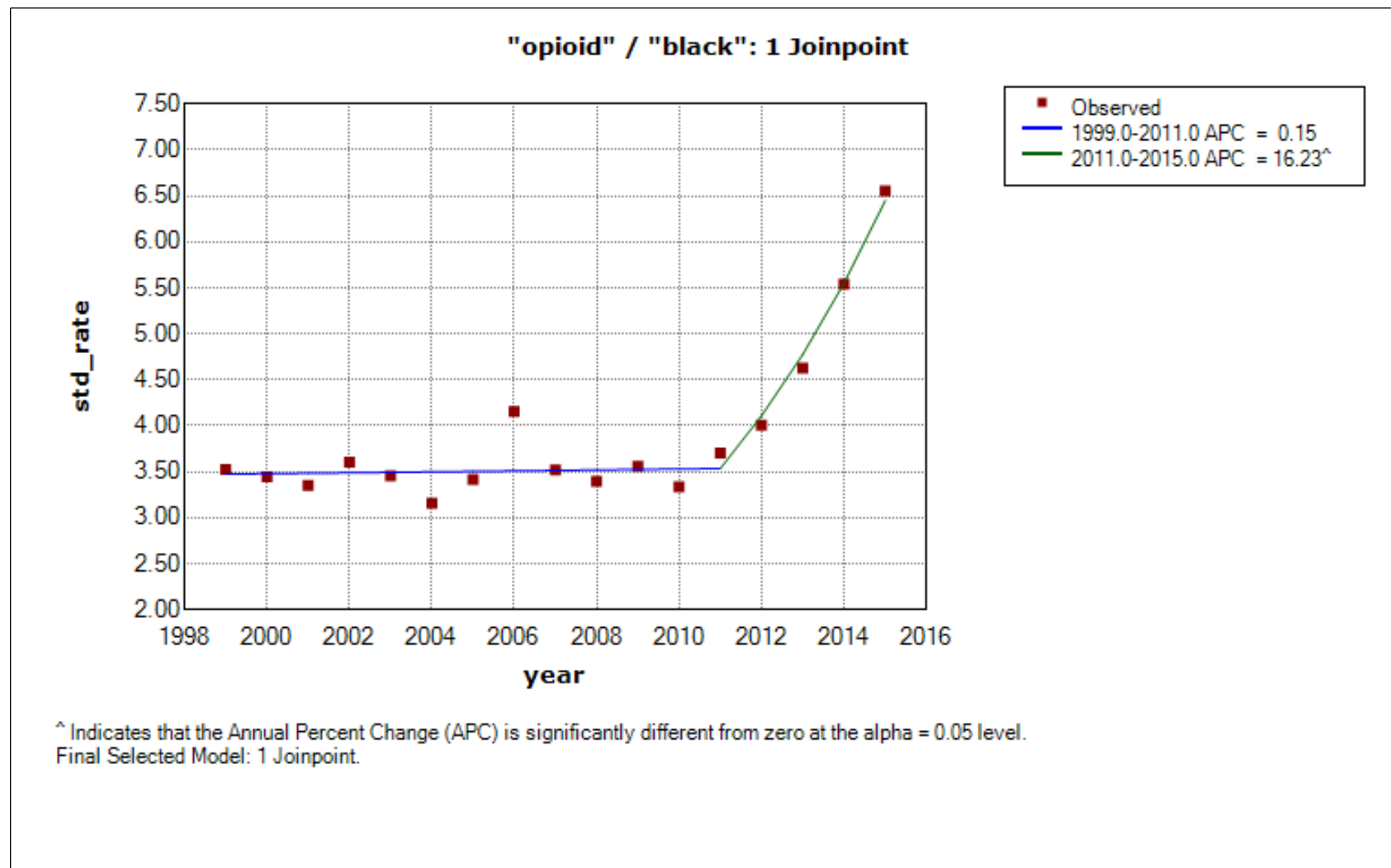
"nonopioid" \ "white", Number of Joinpoints: 1 (Final Selected Model) continued...

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"white"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"white"	#2	1 Joinpoint(s) *	3 Joinpoint(s)	4	9	10000	0.6600000	0.0250000
"white"	#3	1 Joinpoint(s) *	2 Joinpoint(s)	2	11	10000	0.8333000	0.0250000
Final Selected Model: "white" - 1 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"opioid" \ "black"
Number of Joinpoints: 1 (Final Selected Model)



"opioid" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	3.52621	0.10429	3.47319		0.14620
2000	3.44416	0.10144	3.47827		0.14620
2001	3.34886	0.09914	3.48336		0.14620
2002	3.60326	0.10200	3.48845		0.14620
2003	3.45569	0.09901	3.49355		0.14620
2004	3.15453	0.09370	3.49866		0.14620
2005	3.41700	0.09681	3.50377		0.14620
2006	4.15387	0.10584	3.50889		0.14620
2007	3.51996	0.09646	3.51402		0.14620
2008	3.39447	0.09397	3.51916		0.14620
2009	3.55758	0.09559	3.52431		0.14620
2010	3.33422	0.09151	3.52946		0.14620
2011	3.70375	0.09602	3.53462	Joinpoint 1	
2012	4.00570	0.09930	4.10812		16.22521^
2013	4.62788	0.10582	4.77467		16.22521^
2014	5.53964	0.11571	5.54937		16.22521^
2015	6.55236	0.12531	6.44976		16.22521^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"opioid" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"black"	1	17	4	13	73.35074	5.64236	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2011	2009	2013

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	-1.675316	11.215664	-0.149373	0.883740
"black"	Slope 1	0.001461	0.005595	0.261131	0.798419
"black"	Slope 2 - Slope 1	0.148899	0.023759	6.266961	0.000041

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	-1.675316	11.215664	-0.149373	0.883740
"black"	Intercept 2	-301.110499	46.499185	-6.475608	0.000030
"black"	Slope 1	0.001461	0.005595	0.261131	0.798419
"black"	Slope 2	0.150360	0.023091	6.511545	0.000029

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	125.791123	125.791123		-0.062747	0.000000	
"black"	Intercept 2	-0.062747	-0.062747		0.000031	0.000000	
"black"	Slope 1	0.000000	0.000000		0.000000	2162.174165	

"opioid" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Slope 2	0.000000	0.000000		0.000000	-1.073723	

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	1.000000	-0.999999		0.000000	0.000000	
"black"	Intercept 2	-0.999999	1.000000		0.000000	0.000000	
"black"	Slope 1	0.000000	0.000000		1.000000	-1.000000	
"black"	Slope 2	0.000000	0.000000		-1.000000	1.000000	

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2011	2009	2013

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"black"	1	1999	2011	0.146	-1.067	1.374	0.261	0.798
"black"	2	2011	2015	16.225^	10.522	22.222	6.512	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"black"	Full Range	1999	2015	3.944^	2.501	5.409	5.421	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

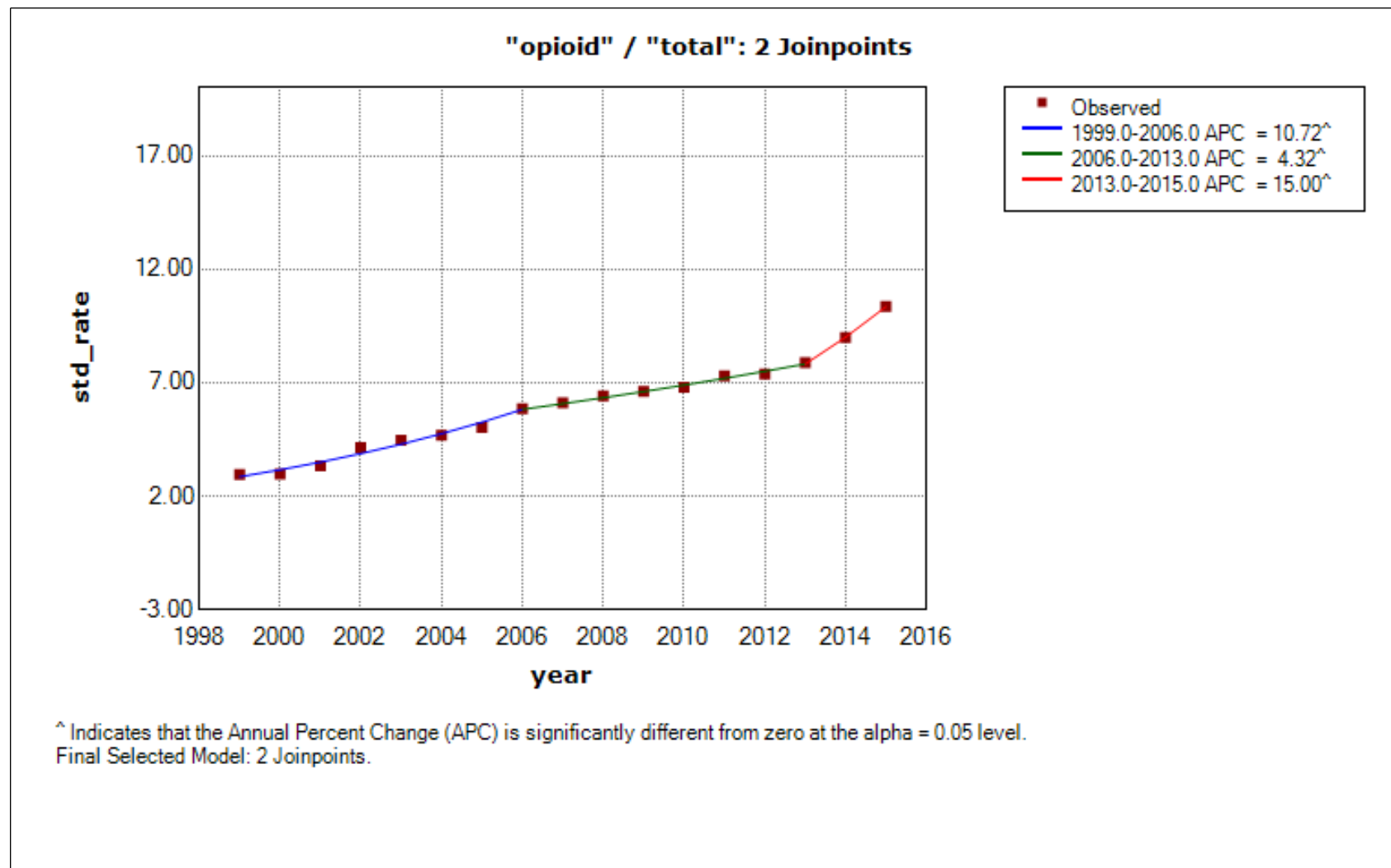
"opioid" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"black"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0002000	0.0166667
"black"	#2	1 Joinpoint(s) *	3 Joinpoint(s)	4	9	10000	0.5407000	0.0250000
"black"	#3	1 Joinpoint(s) *	2 Joinpoint(s)	2	11	10000	0.6960000	0.0250000
Final Selected Model: "black" - 1 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"opioid" \ "total"
Number of Joinpoints: 2 (Final Selected Model)



"opioid" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	2.94391	0.03283	2.85258		10.7204 1^
2000	2.97492	0.03247	3.15839		10.7204 1^
2001	3.32341	0.03413	3.49699		10.7204 1^
2002	4.13969	0.03796	3.87188		10.7204 1^
2003	4.45562	0.03924	4.28696		10.7204 1^
2004	4.68551	0.04006	4.74654		10.7204 1^
2005	5.02397	0.04129	5.25539		10.7204 1^
2006	5.84217	0.04435	5.81879	Joinpoint 1	
2007	6.11372	0.04524	6.07009		4.31888^
2008	6.40701	0.04617	6.33225		4.31888^
2009	6.62095	0.04682	6.60574		4.31888^
2010	6.79291	0.04736	6.89103		4.31888^
2011	7.29823	0.04903	7.18865		4.31888^
2012	7.36840	0.04917	7.49911		4.31888^
2013	7.88283	0.05067	7.82299	Joinpoint 2	
2014	8.98364	0.05407	8.99649		15.0006 5^
2015	10.35244	0.05802	10.34602		15.0006 5^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"opioid" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"total"	2	17	6	11	189.02982	17.18453	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2006	2004	2009
"total"	2	2013	2011	2013

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-202.526036	16.217258	-12.488303	0.000001
"total"	Slope 1	0.101838	0.008099	12.574503	0.000001
"total"	Slope 2 - Slope 1	-0.059556	0.011006	-5.411308	0.000427
"total"	Slope 3 - Slope 2	0.097485	0.037318	2.612261	0.028166

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-202.526036	16.217258	-12.488303	0.000001
"total"	Intercept 2	-83.056996	14.976463	-5.545835	0.000358
"total"	Intercept 3	-279.295086	73.664968	-3.791423	0.004273
"total"	Slope 1	0.101838	0.008099	12.574503	0.000001
"total"	Slope 2	0.042282	0.007452	5.673657	0.000304
"total"	Slope 3	0.139768	0.036567	3.822262	0.004076

- The statistic could not be calculated.

"opioid" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	262.999467	262.999467	-0.131340	0.000000	0.000000	0.000000
"total"	Intercept 2	-0.131340	-0.131340	0.000066	0.000000	0.000000	0.000000
"total"	Intercept 3	0.000000	0.000000	0.000000	224.294445	-0.111610	0.000000
"total"	Slope 1	0.000000	0.000000	0.000000	-0.111610	0.000056	0.000000
"total"	Slope 2	0.000000	0.000000	0.000000	0.000000	0.000000	5426.527514
"total"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	-2.693686

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	1.000000	-1.000000	0.000000	0.000000	0.000000	0.000000
"total"	Intercept 2	-1.000000	1.000000	0.000000	0.000000	0.000000	0.000000
"total"	Intercept 3	0.000000	0.000000	1.000000	-1.000000	0.000000	0.000000
"total"	Slope 1	0.000000	0.000000	-1.000000	1.000000	0.000000	0.000000
"total"	Slope 2	0.000000	0.000000	0.000000	0.000000	1.000000	-1.000000
"total"	Slope 3	0.000000	0.000000	0.000000	0.000000	-1.000000	1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2006	2004	2009
"total"	2	2013	2011	2013

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"total"	1	1999	2006	10.720^	8.710	12.768	12.575	0.000
"total"	2	2006	2013	4.319^	2.575	6.092	5.674	0.000
"total"	3	2013	2015	15.001^	5.871	24.918	3.822	0.004

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

"opioid" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"total"	Full Range	1999	2015	8.385^	6.984	9.805	12.129	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

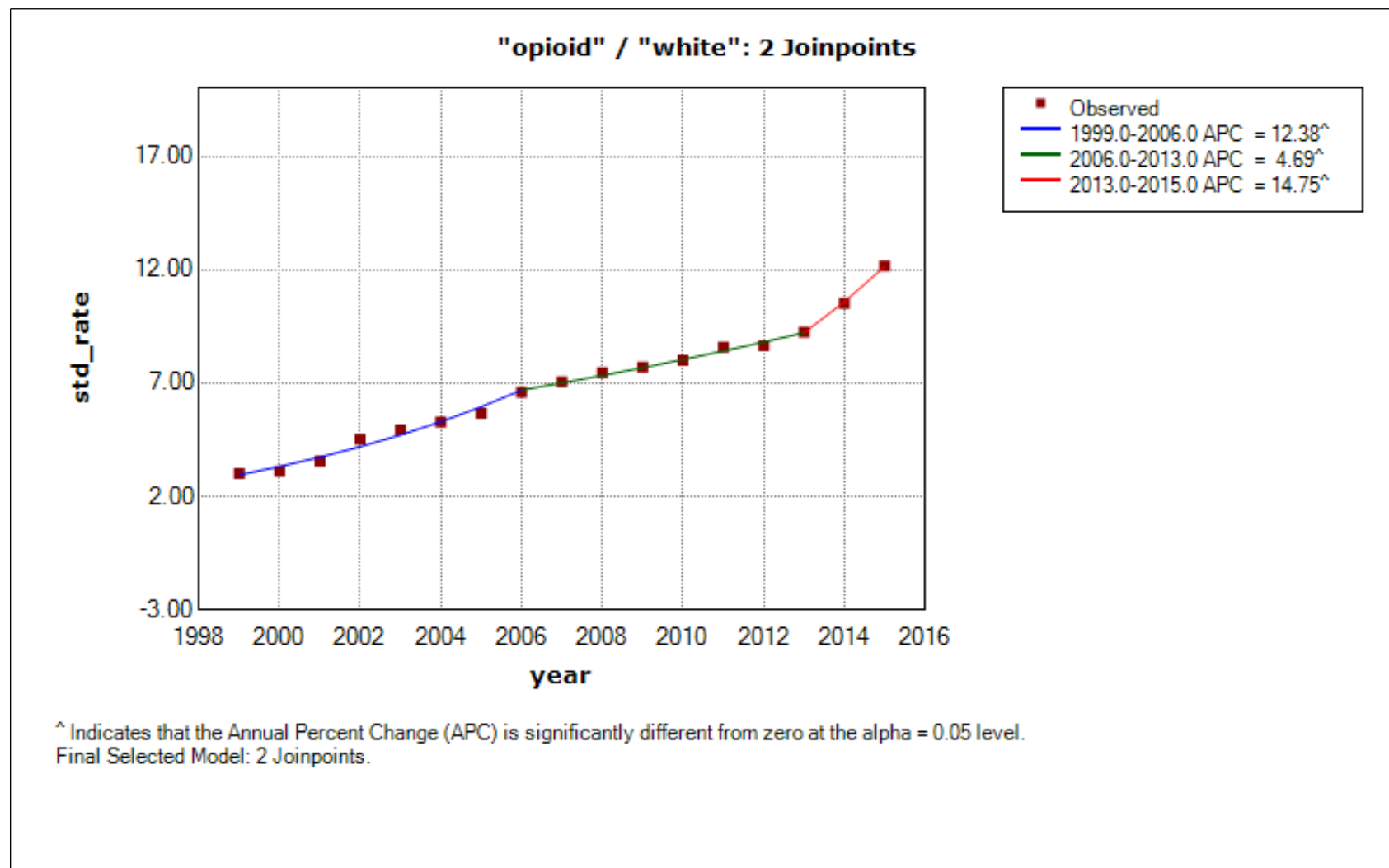
Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"total"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0005000	0.0166667
"total"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0012000	0.0250000
"total"	#3	2 Joinpoint(s) *	3 Joinpoint(s)	2	9	10000	0.6465000	0.0500000

Final Selected Model: "total" - 2 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test

"opioid" \ "white"
Number of Joinpoints: 2 (Final Selected Model)



"opioid" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	3.00772	0.03654	2.95488		12.38303 [^]
2000	3.10459	0.03679	3.32079		12.38303 [^]
2001	3.55662	0.03925	3.73200		12.38303 [^]
2002	4.51861	0.04418	4.19413		12.38303 [^]
2003	4.94388	0.04616	4.71350		12.38303 [^]
2004	5.27808	0.04760	5.29717		12.38303 [^]
2005	5.66381	0.04919	5.95312		12.38303 [^]
2006	6.60067	0.05303	6.69030	Joinpoint 1	
2007	7.05551	0.05479	7.00393		4.68787 [^]
2008	7.44834	0.05627	7.33226		4.68787 [^]
2009	7.68840	0.05713	7.67599		4.68787 [^]
2010	7.99604	0.05835	8.03583		4.68787 [^]
2011	8.58749	0.06053	8.41254		4.68787 [^]
2012	8.64186	0.06072	8.80691		4.68787 [^]
2013	9.24048	0.06270	9.21977	Joinpoint 2	
2014	10.51858	0.06700	10.57976		14.75082 [^]
2015	12.17096	0.07224	12.14036		14.75082 [^]

[^] Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"opioid" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"white"	2	17	6	11	196.11898	17.82900	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2006	2004	2009
"white"	2	2013	2011	2013

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-232.285398	17.775041	-13.068065	0.000000
"white"	Slope 1	0.116743	0.008877	13.151848	0.000000
"white"	Slope 2 - Slope 1	-0.070930	0.011949	-5.935995	0.000219
"white"	Slope 3 - Slope 2	0.091780	0.040353	2.274419	0.049008

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-232.285398	17.775041	-13.068065	0.000000
"white"	Intercept 2	-90.000392	16.075444	-5.598626	0.000335
"white"	Intercept 3	-274.752905	79.679371	-3.448231	0.007295
"white"	Slope 1	0.116743	0.008877	13.151848	0.000000
"white"	Slope 2	0.045813	0.007999	5.727180	0.000284
"white"	Slope 3	0.137593	0.039552	3.478761	0.006952

- The statistic could not be calculated.

"opioid" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	315.952093	315.952093	-0.157781	0.000000	0.000000	0.000000
"white"	Intercept 2	-0.157781	-0.157781	0.000079	0.000000	0.000000	0.000000
"white"	Intercept 3	0.000000	0.000000	0.000000	258.419895	-0.128591	0.000000
"white"	Slope 1	0.000000	0.000000	0.000000	-0.128591	0.000064	0.000000
"white"	Slope 2	0.000000	0.000000	0.000000	0.000000	0.000000	6348.802165
"white"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	-3.151497

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	1.000000	-1.000000	0.000000	0.000000	0.000000	0.000000
"white"	Intercept 2	-1.000000	1.000000	0.000000	0.000000	0.000000	0.000000
"white"	Intercept 3	0.000000	0.000000	1.000000	-1.000000	0.000000	0.000000
"white"	Slope 1	0.000000	0.000000	-1.000000	1.000000	0.000000	0.000000
"white"	Slope 2	0.000000	0.000000	0.000000	0.000000	1.000000	-1.000000
"white"	Slope 3	0.000000	0.000000	0.000000	0.000000	-1.000000	1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2006	2004	2009
"white"	2	2013	2011	2013

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"white"	1	1999	2006	12.383^	10.149	14.663	13.152	0.000
"white"	2	2006	2013	4.688^	2.811	6.599	5.727	0.000
"white"	3	2013	2015	14.751^	4.930	25.491	3.479	0.007

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

"opioid" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"white"	Full Range	1999	2015	9.233^	7.704	10.785	12.274	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

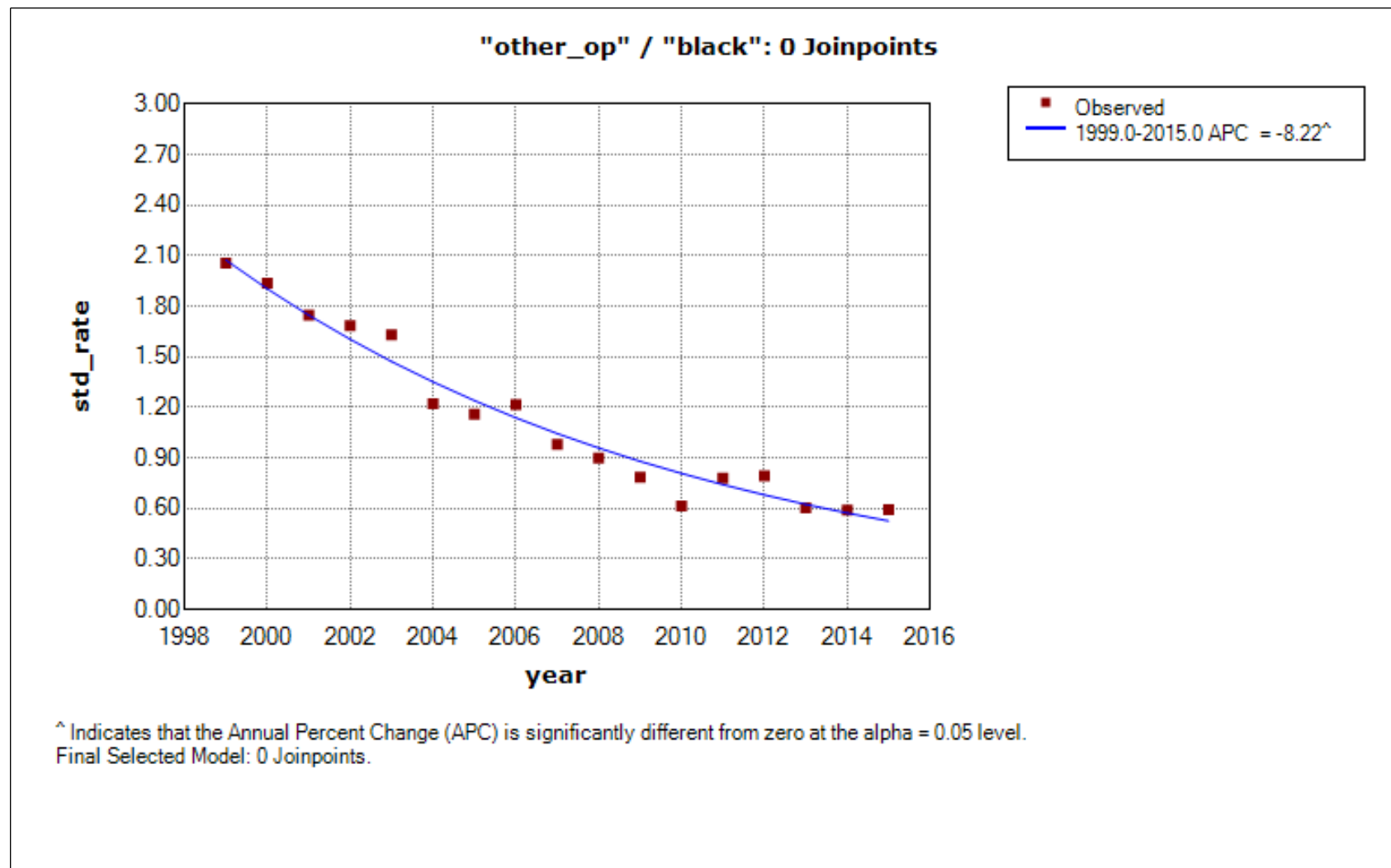
Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"white"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"white"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0013000	0.0250000
"white"	#3	2 Joinpoint(s) *	3 Joinpoint(s)	2	9	10000	0.1740000	0.0500000

Final Selected Model: "white" - 2 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test

"other_op" \ "black"
Number of Joinpoints: 0 (Final Selected Model)



"other_op" \ "black", Number of Joinpoints: 0 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	2.05618	0.07944	2.07368		- 8.21527^
2000	1.93655	0.07604	1.90332		- 8.21527^
2001	1.74711	0.07154	1.74696		- 8.21527^
2002	1.68570	0.06972	1.60344		- 8.21527^
2003	1.63031	0.06811	1.47172		- 8.21527^
2004	1.22157	0.05866	1.35081		- 8.21527^
2005	1.15939	0.05650	1.23984		- 8.21527^
2006	1.21679	0.05745	1.13798		- 8.21527^
2007	0.98092	0.05103	1.04449		- 8.21527^
2008	0.89783	0.04867	0.95869		- 8.21527^
2009	0.78488	0.04526	0.87993		- 8.21527^
2010	0.61370	0.03980	0.80764		- 8.21527^
2011	0.78089	0.04430	0.74129		- 8.21527^
2012	0.79427	0.04408	0.68039		- 8.21527^
2013	0.60254	0.03804	0.62449		- 8.21527^
2014	0.58958	0.03768	0.57319		- 8.21527^
2015	0.59282	0.03791	0.52610		- 8.21527^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"other_op" \ "black", Number of Joinpoints: 0 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"black"	0	17	2	15	53.40062	3.56004	Uncorrelated

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	172.092117	9.453171	18.204697	0.000000
"black"	Slope 1	-0.085724	0.004714	-18.185130	0.000000

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	172.092117	9.453171	18.204697	0.000000
"black"	Slope 1	-0.085724	0.004714	-18.185130	0.000000

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	89.362449			89.362449		
"black"	Slope 1	-0.044562			-0.044562		

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	1.000000			-0.999997		
"black"	Slope 1	-0.999997			1.000000		

"other_op" \ "black", Number of Joinpoints: 0 (Final Selected Model) continued...

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"black"	1	1999	2015	-8.215^	-9.133	-7.288	-18.185	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"black"	Full Range	1999	2015	-8.215^	-9.133	-7.288	-18.185	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

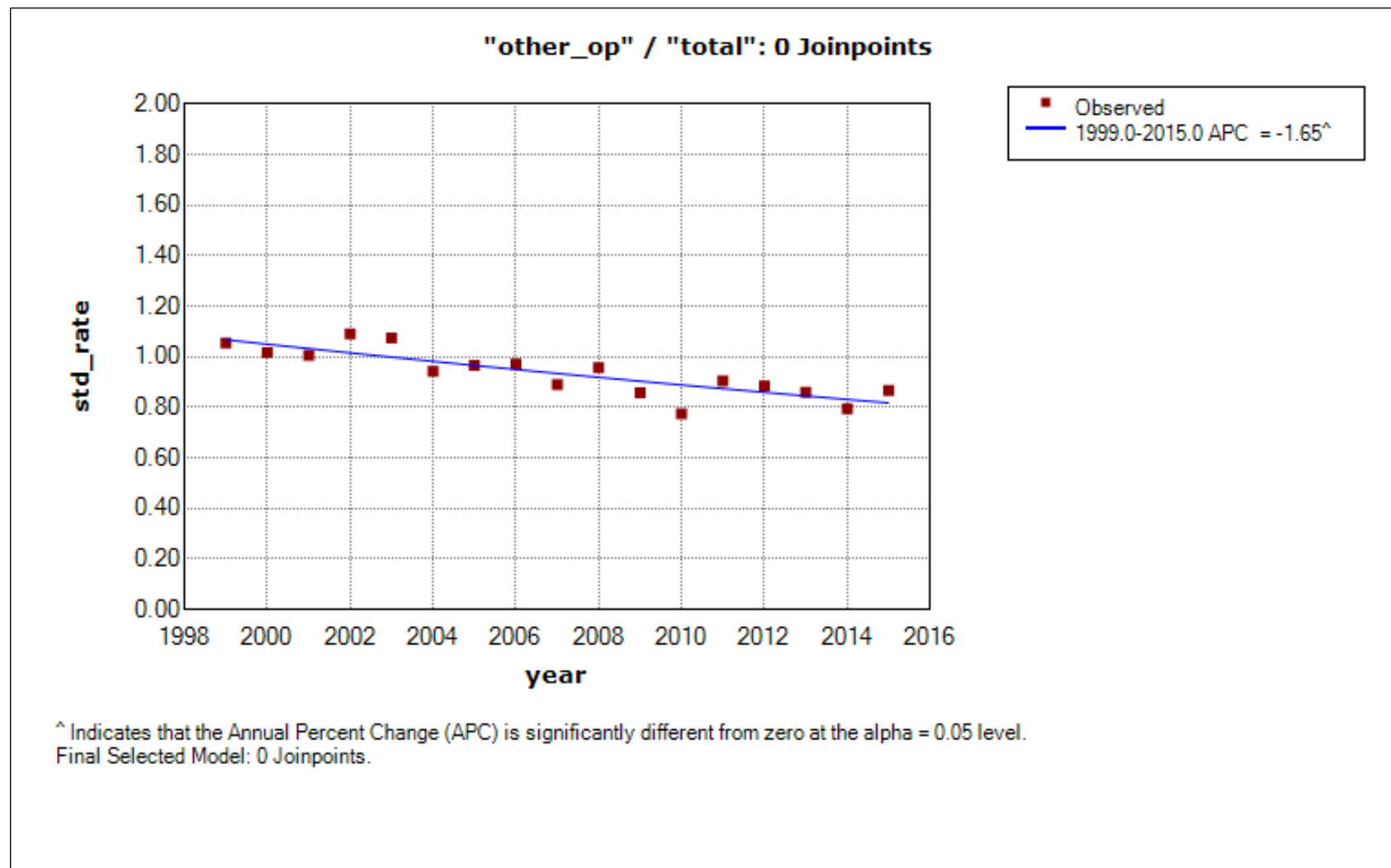
- The statistic could not be calculated.

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"black"	#1	0 Joinpoint(s) *	3 Joinpoint(s)	6	9	10000	0.3798000	0.0166667
"black"	#2	0 Joinpoint(s) *	2 Joinpoint(s)	4	11	10000	0.3481000	0.0166667
"black"	#3	0 Joinpoint(s) *	1 Joinpoint(s)	2	13	10000	0.1884000	0.0166667
Final Selected Model: "black" - 0 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"other_op" \ "total"
Number of Joinpoints: 0 (Final Selected Model)



"other_op" \ "total", Number of Joinpoints: 0 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	1.05509	0.01964	1.06738		- 1.65296^
2000	1.01633	0.01898	1.04974		- 1.65296^
2001	1.00644	0.01879	1.03238		- 1.65296^
2002	1.09110	0.01950	1.01532		- 1.65296^
2003	1.07412	0.01929	0.99854		- 1.65296^
2004	0.94166	0.01800	0.98203		- 1.65296^
2005	0.96621	0.01813	0.96580		- 1.65296^
2006	0.97060	0.01811	0.94983		- 1.65296^
2007	0.89101	0.01732	0.93413		- 1.65296^
2008	0.95691	0.01786	0.91869		- 1.65296^
2009	0.85849	0.01687	0.90351		- 1.65296^
2010	0.77414	0.01604	0.88857		- 1.65296^
2011	0.90418	0.01729	0.87389		- 1.65296^
2012	0.88416	0.01702	0.85944		- 1.65296^
2013	0.85907	0.01675	0.84523		- 1.65296^
2014	0.79528	0.01603	0.83126		- 1.65296^
2015	0.86715	0.01678	0.81752		- 1.65296^

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"other_op" \ "total", Number of Joinpoints: 0 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"total"	0	17	2	15	125.98332	8.39889	Uncorrelated

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	33.383946	5.485734	6.085593	0.000021
"total"	Slope 1	-0.016668	0.002734	-6.097294	0.000020

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	33.383946	5.485734	6.085593	0.000021
"total"	Slope 1	-0.016668	0.002734	-6.097294	0.000020

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	30.093278			30.093278		
"total"	Slope 1	-0.014996			-0.014996		

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	1.000000			-0.999997		
"total"	Slope 1	-0.999997			1.000000		

"other_op" \ "total", Number of Joinpoints: 0 (Final Selected Model) continued...

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"total"	1	1999	2015	-1.653 [^]	-2.224	-1.078	-6.097	0.000

[^] Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"total"	Full Range	1999	2015	-1.653 [^]	-2.224	-1.078	-6.097	0.000

[^] Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

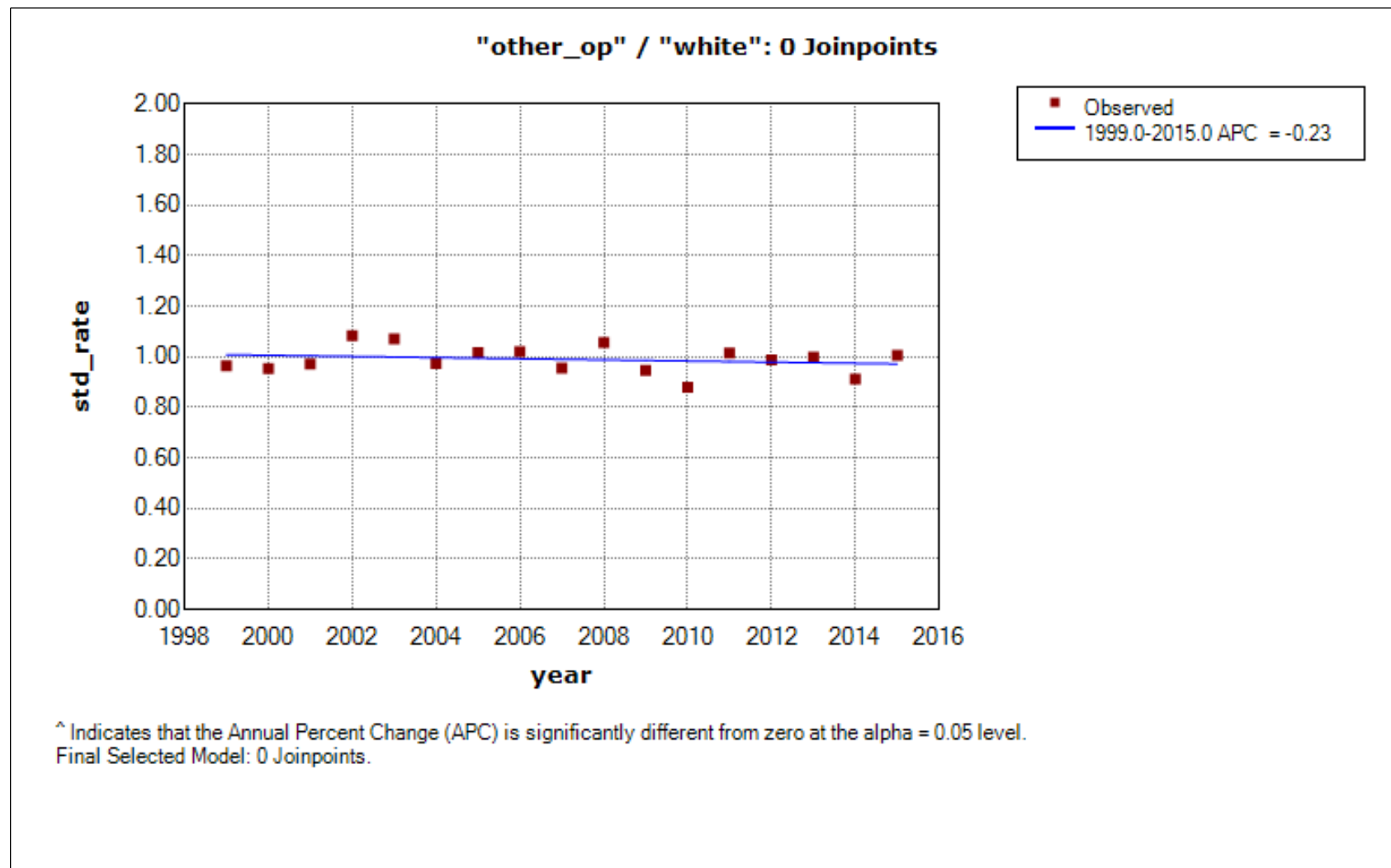
- The statistic could not be calculated.

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"total"	#1	0 Joinpoint(s) *	3 Joinpoint(s)	6	9	10000	0.6379000	0.0166667
"total"	#2	0 Joinpoint(s) *	2 Joinpoint(s)	4	11	10000	0.4737000	0.0166667
"total"	#3	0 Joinpoint(s) *	1 Joinpoint(s)	2	13	10000	0.6406000	0.0166667
Final Selected Model: "total" - 0 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"other_op" \ "white"
Number of Joinpoints: 0 (Final Selected Model)



"other_op" \ "white", Number of Joinpoints: 0 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	0.96368	0.02069	1.00819		-0.22726
2000	0.95350	0.02041	1.00590		-0.22726
2001	0.97104	0.02053	1.00361		-0.22726
2002	1.08402	0.02168	1.00133		-0.22726
2003	1.07155	0.02152	0.99906		-0.22726
2004	0.97372	0.02050	0.99679		-0.22726
2005	1.01650	0.02088	0.99452		-0.22726
2006	1.01968	0.02090	0.99226		-0.22726
2007	0.95432	0.02024	0.99001		-0.22726
2008	1.05588	0.02122	0.98776		-0.22726
2009	0.94655	0.02006	0.98551		-0.22726
2010	0.88005	0.01944	0.98327		-0.22726
2011	1.01531	0.02090	0.98104		-0.22726
2012	0.98682	0.02056	0.97881		-0.22726
2013	0.99835	0.02070	0.97658		-0.22726
2014	0.91173	0.01967	0.97436		-0.22726
2015	1.00492	0.02074	0.97215		-0.22726

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"other_op" \ "white", Number of Joinpoints: 0 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"white"	0	17	2	15	104.10104	6.94007	Uncorrelated

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	4.556203	5.497284	0.828810	0.420205
"white"	Slope 1	-0.002275	0.002739	-0.830634	0.419206

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	4.556203	5.497284	0.828810	0.420205
"white"	Slope 1	-0.002275	0.002739	-0.830634	0.419206

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	30.220129			30.220129		
"white"	Slope 1	-0.015057			-0.015057		

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	1.000000			-0.999997		
"white"	Slope 1	-0.999997			1.000000		

"other_op" \ "white", Number of Joinpoints: 0 (Final Selected Model) continued...

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"white"	1	1999	2015	-0.227	-0.808	0.357	-0.831	0.419

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"white"	Full Range	1999	2015	-0.227	-0.808	0.357	-0.831	0.419

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

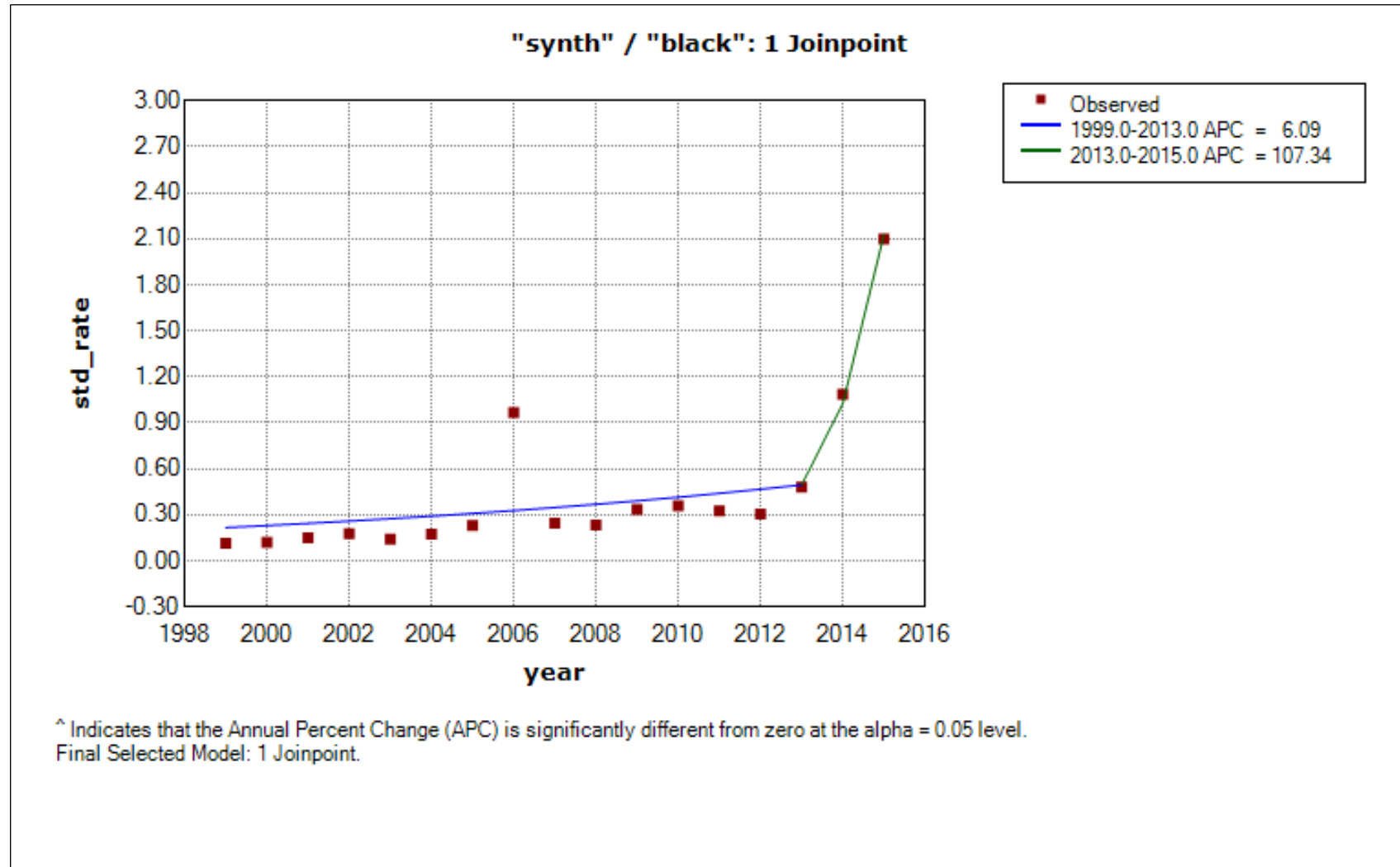
- The statistic could not be calculated.

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"white"	#1	0 Joinpoint(s) *	3 Joinpoint(s)	6	9	10000	0.5244000	0.0166667
"white"	#2	0 Joinpoint(s) *	2 Joinpoint(s)	4	11	10000	0.3410000	0.0166667
"white"	#3	0 Joinpoint(s) *	1 Joinpoint(s)	2	13	10000	0.2396000	0.0166667
Final Selected Model: "white" - 0 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"synth" \ "black"
Number of Joinpoints: 1 (Final Selected Model)



"synth" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	0.11512	0.01892	0.21645		6.08566
2000	0.11989	0.01909	0.22962		6.08566
2001	0.14911	0.02106	0.24360		6.08566
2002	0.17704	0.02263	0.25842		6.08566
2003	0.14090	0.01982	0.27415		6.08566
2004	0.17385	0.02178	0.29083		6.08566
2005	0.23043	0.02507	0.30853		6.08566
2006	0.96676	0.05117	0.32730		6.08566
2007	0.24444	0.02567	0.34722		6.08566
2008	0.23367	0.02493	0.36835		6.08566
2009	0.33434	0.02914	0.39077		6.08566
2010	0.35820	0.03004	0.41455		6.08566
2011	0.32676	0.02849	0.43978		6.08566
2012	0.30401	0.02726	0.46654		6.08566
2013	0.48120	0.03413	0.49494	Joinpoint 1	
2014	1.08484	0.05153	1.02622		107.34320
2015	2.09826	0.07070	2.12779		107.34320

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"synth" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"black"	1	17	4	13	589.08946	45.31457	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2013	2010	2013

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	-119.624807	108.311409	-1.104453	0.291051
"black"	Slope 1	0.059077	0.053970	1.094623	0.295167
"black"	Slope 2 - Slope 1	0.670128	0.410956	1.630655	0.128912

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"black"	Intercept 1	-119.624807	108.311409	-1.104453	0.291051
"black"	Intercept 2	-1468.593368	820.769038	-1.789289	0.098817
"black"	Slope 1	0.059077	0.053970	1.094623	0.295167
"black"	Slope 2	0.729205	0.407397	1.789912	0.098713

- The statistic could not be calculated.

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	11731.361425	11731.361425		-5.845553	0.000000	
"black"	Intercept 2	-5.845553	-5.845553		0.002913	0.000000	
"black"	Slope 1	0.000000	0.000000		0.000000	673661.813357	

"synth" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Slope 2	0.000000	0.000000		0.000000	-334.379007	

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"black"	Intercept 1	1.000000	-0.999999		0.000000	0.000000	
"black"	Intercept 2	-0.999999	1.000000		0.000000	0.000000	
"black"	Slope 1	0.000000	0.000000		1.000000	-1.000000	
"black"	Slope 2	0.000000	0.000000		-1.000000	1.000000	

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"black"	1	2013	2010	2013

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"black"	1	1999	2013	6.086	-5.683	19.323	1.095	0.295
"black"	2	2013	2015	107.343	-14.652	403.719	1.790	0.099

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"black"	Full Range	1999	2015	15.355^	0.674	32.176	2.057	0.040

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

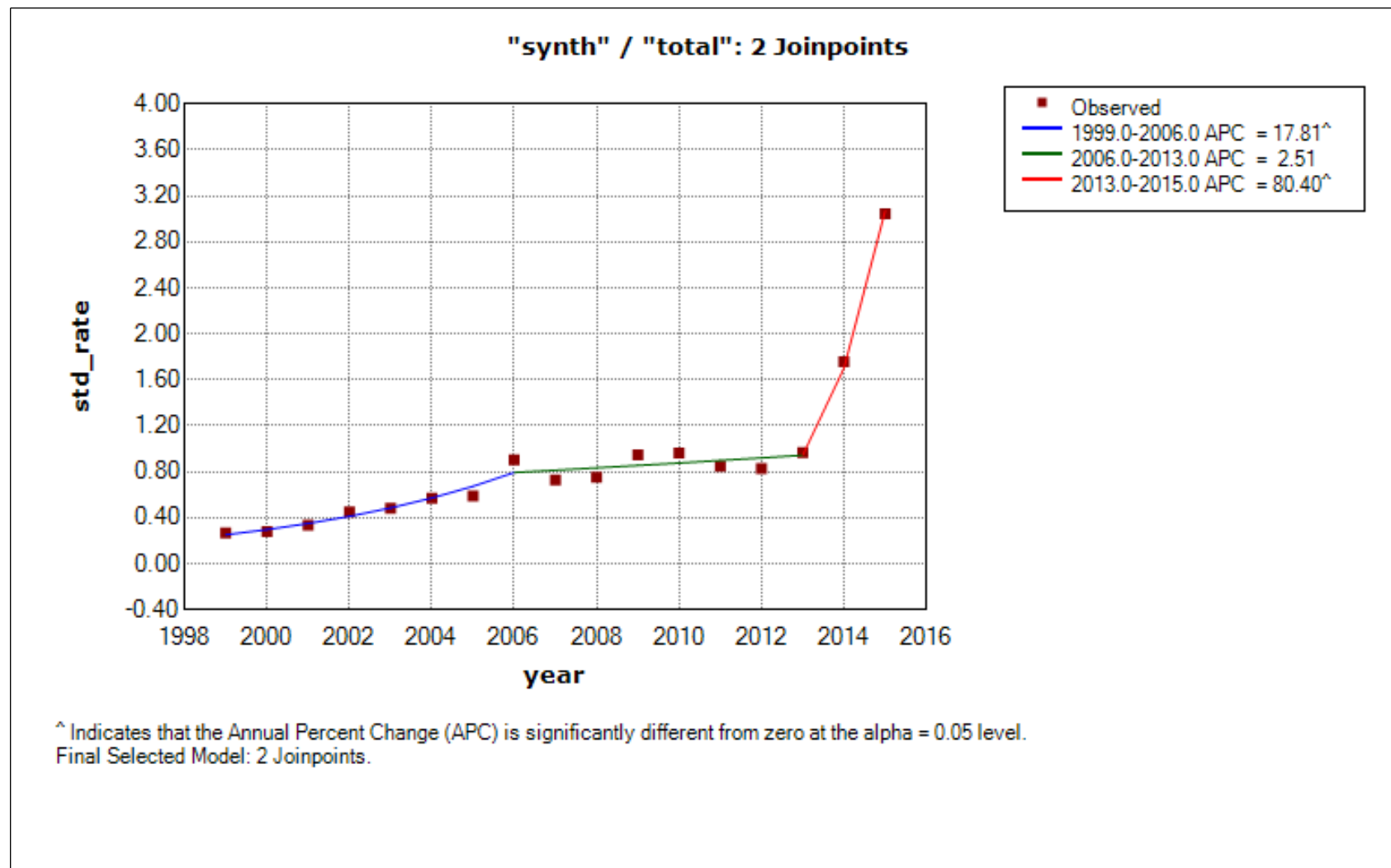
"synth" \ "black", Number of Joinpoints: 1 (Final Selected Model) continued...

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"black"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0050000	0.0166667
"black"	#2	1 Joinpoint(s) *	3 Joinpoint(s)	4	9	10000	0.0640000	0.0250000
"black"	#3	1 Joinpoint(s) *	2 Joinpoint(s)	2	11	10000	0.0717000	0.0250000
Final Selected Model: "black" - 1 Joinpoint(s)								

* Final Selected Model

~ Significance level for individual test

"synth" \ "total"
Number of Joinpoints: 2 (Final Selected Model)



"synth" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	0.26792	0.00992	0.25177		17.81097 [^]
2000	0.27820	0.00995	0.29661		17.81097 [^]
2001	0.33556	0.01086	0.34944		17.81097 [^]
2002	0.44941	0.01250	0.41168		17.81097 [^]
2003	0.48310	0.01293	0.48500		17.81097 [^]
2004	0.56737	0.01395	0.57138		17.81097 [^]
2005	0.58689	0.01412	0.67315		17.81097 [^]
2006	0.90207	0.01743	0.79305	Joinpoint 1	
2007	0.72949	0.01562	0.81297		2.51265
2008	0.75237	0.01581	0.83340		2.51265
2009	0.94802	0.01767	0.85434		2.51265
2010	0.96196	0.01778	0.87581		2.51265
2011	0.84717	0.01665	0.89781		2.51265
2012	0.82773	0.01642	0.92037		2.51265
2013	0.96504	0.01764	0.94350	Joinpoint 2	
2014	1.75735	0.02401	1.70211		80.40375 [^]
2015	3.04242	0.03163	3.07067		80.40375 [^]

[^] Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"synth" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"total"	2	17	6	11	245.89514	22.35410	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2006	2003	2010
"total"	2	2013	2012	2013

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-329.037682	49.470247	-6.651224	0.000094
"total"	Slope 1	0.163911	0.024703	6.635298	0.000095
"total"	Slope 2 - Slope 1	-0.139095	0.032624	-4.263582	0.002100
"total"	Slope 3 - Slope 2	0.565211	0.077738	7.270715	0.000047

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"total"	Intercept 1	-329.037682	49.470247	-6.651224	0.000094
"total"	Intercept 2	-50.012850	42.823276	-1.167889	0.272858
"total"	Intercept 3	-1187.782984	150.614725	-7.886234	0.000025
"total"	Slope 1	0.163911	0.024703	6.635298	0.000095
"total"	Slope 2	0.024816	0.021309	1.164557	0.274138
"total"	Slope 3	0.590027	0.074760	7.892247	0.000025

- The statistic could not be calculated.

"synth" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	2447.305293	2447.305293	-1.222059	0.000000	0.000000	0.000000
"total"	Intercept 2	-1.222059	-1.222059	0.000610	0.000000	0.000000	0.000000
"total"	Intercept 3	0.000000	0.000000	0.000000	1833.832960	-0.912539	0.000000
"total"	Slope 1	0.000000	0.000000	0.000000	-0.912539	0.000454	0.000000
"total"	Slope 2	0.000000	0.000000	0.000000	0.000000	0.000000	22684.795441
"total"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	-11.260011

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"total"	Intercept 1	1.000000	-1.000000	0.000000	0.000000	0.000000	0.000000
"total"	Intercept 2	-1.000000	1.000000	0.000000	0.000000	0.000000	0.000000
"total"	Intercept 3	0.000000	0.000000	1.000000	-1.000000	0.000000	0.000000
"total"	Slope 1	0.000000	0.000000	-1.000000	1.000000	0.000000	0.000000
"total"	Slope 2	0.000000	0.000000	0.000000	0.000000	1.000000	-1.000000
"total"	Slope 3	0.000000	0.000000	0.000000	0.000000	-1.000000	1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"total"	1	2006	2003	2010
"total"	2	2013	2012	2013

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"total"	1	1999	2006	17.811^	11.408	24.582	6.635	0.000
"total"	2	2006	2013	2.513	-2.312	7.575	1.165	0.274
"total"	3	2013	2015	80.404^	52.334	113.645	7.892	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

"synth" \ "total", Number of Joinpoints: 2 (Final Selected Model) continued...

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"total"	Full Range	1999	2015	16.920^	13.075	20.896	9.163	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

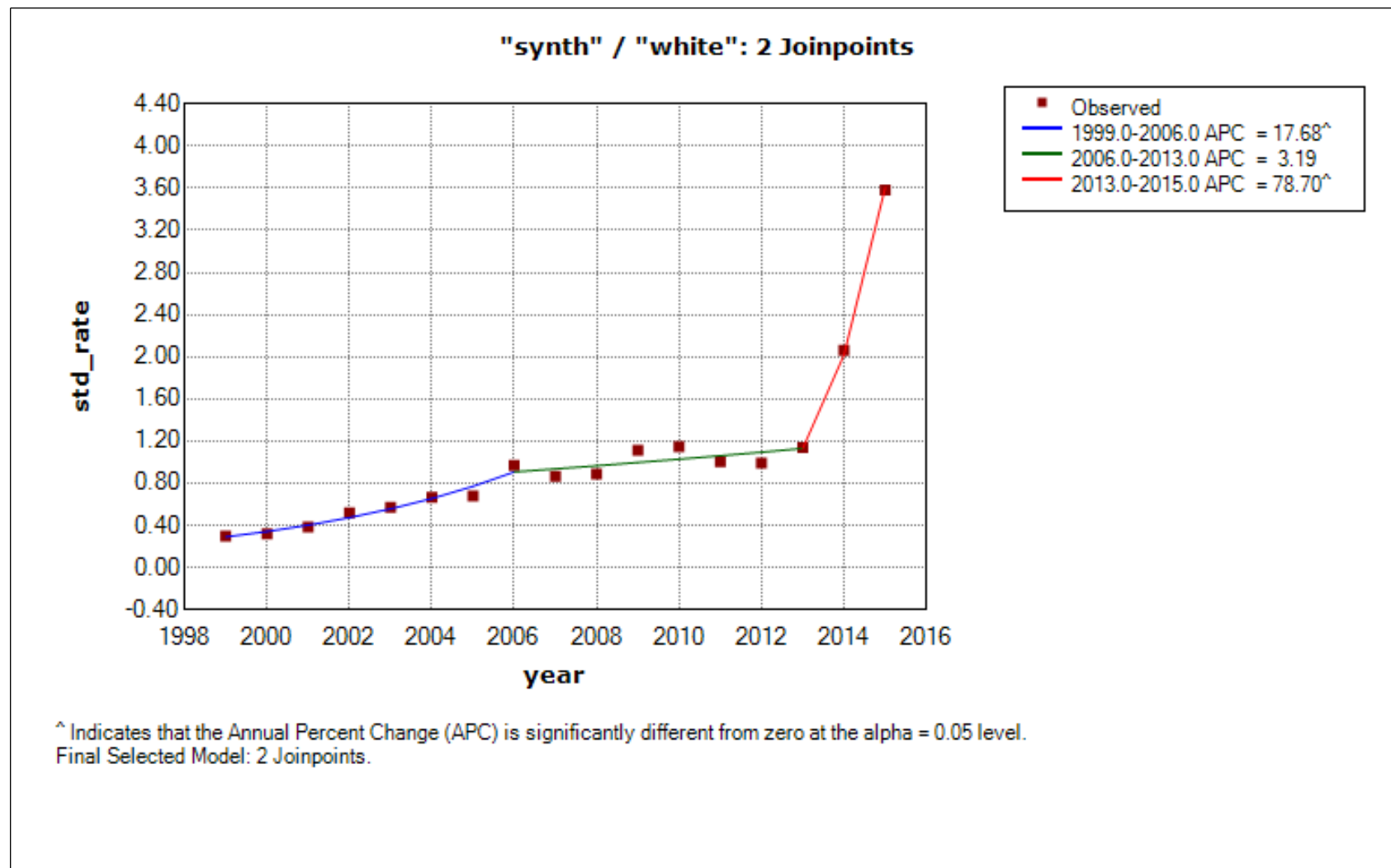
Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"total"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"total"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0043000	0.0250000
"total"	#3	2 Joinpoint(s) *	3 Joinpoint(s)	2	9	10000	0.9599000	0.0500000

Final Selected Model: "total" - 2 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test

"synth" \ "white"
Number of Joinpoints: 2 (Final Selected Model)



"synth" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Observed and Modeled Data Points					
X Value	Observed Y Value	Standard Error	Modeled Y Value	JP Location	APC
1999	0.29763	0.01147	0.29004		17.68495 [^]
2000	0.31789	0.01175	0.34134		17.68495 [^]
2001	0.38474	0.01288	0.40170		17.68495 [^]
2002	0.51960	0.01493	0.47274		17.68495 [^]
2003	0.56848	0.01563	0.55635		17.68495 [^]
2004	0.66406	0.01684	0.65474		17.68495 [^]
2005	0.67826	0.01697	0.77053		17.68495 [^]
2006	0.96812	0.02028	0.90679	Joinpoint 1	
2007	0.86681	0.01914	0.93571		3.18905
2008	0.88836	0.01935	0.96555		3.18905
2009	1.11276	0.02161	0.99634		3.18905
2010	1.14632	0.02200	1.02812		3.18905
2011	1.00458	0.02058	1.06091		3.18905
2012	0.98883	0.02043	1.09474		3.18905
2013	1.13935	0.02186	1.12965	Joinpoint 2	
2014	2.06307	0.02979	2.01868		78.69989 [^]
2015	3.58462	0.03949	3.60739		78.69989 [^]

[^] Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

"synth" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Model Statistics							
Cohort	Number of Joinpoints	Number of Observations	Number of Parameters	Degrees of Freedom	Sum of Squared Errors	Mean Squared Error	Autocorrelation Parameter
"white"	2	17	6	11	178.63099	16.23918	Uncorrelated

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2006	2003	2010
"white"	2	2013	2012	2013

Estimated Regression Coefficients (Beta)					
Standard Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-326.756768	49.416004	-6.612367	0.000098
"white"	Slope 1	0.162841	0.024676	6.599210	0.000099
"white"	Slope 2 - Slope 1	-0.131448	0.032586	-4.033926	0.002955
"white"	Slope 3 - Slope 2	0.549145	0.079061	6.945804	0.000067

- The statistic could not be calculated.

General Parameterization					
Cohort	Parameter	Param Estimate	Standard Error	Test Statistic (t)	Prob > t
"white"	Intercept 1	-326.756768	49.416004	-6.612367	0.000098
"white"	Intercept 2	-63.071392	42.768379	-1.474720	0.174389
"white"	Intercept 3	-1168.500268	153.400346	-7.617325	0.000033
"white"	Slope 1	0.162841	0.024676	6.599210	0.000099
"white"	Slope 2	0.031393	0.021282	1.475063	0.174298
"white"	Slope 3	0.580538	0.076143	7.624296	0.000032

- The statistic could not be calculated.

"synth" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Covariance Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	2441.941449	2441.941449	-1.219380	0.000000	0.000000	0.000000
"white"	Intercept 2	-1.219380	-1.219380	0.000609	0.000000	0.000000	0.000000
"white"	Intercept 3	0.000000	0.000000	0.000000	1829.134238	-0.910205	0.000000
"white"	Slope 1	0.000000	0.000000	0.000000	-0.910205	0.000453	0.000000
"white"	Slope 2	0.000000	0.000000	0.000000	0.000000	0.000000	23531.666177
"white"	Slope 3	0.000000	0.000000	0.000000	0.000000	0.000000	-11.680378

Correlation Matrix							
Cohort	Parameter	Intercept 1	Intercept 2	Intercept 3	Slope 1	Slope 2	Slope 3
"white"	Intercept 1	1.000000	-1.000000	0.000000	0.000000	0.000000	0.000000
"white"	Intercept 2	-1.000000	1.000000	0.000000	0.000000	0.000000	0.000000
"white"	Intercept 3	0.000000	0.000000	1.000000	-1.000000	0.000000	0.000000
"white"	Slope 1	0.000000	0.000000	-1.000000	1.000000	0.000000	0.000000
"white"	Slope 2	0.000000	0.000000	0.000000	0.000000	1.000000	-1.000000
"white"	Slope 3	0.000000	0.000000	0.000000	0.000000	-1.000000	1.000000

Estimated Joinpoints				
Cohort	Joinpoint	Estimate	Lower CI	Upper CI
"white"	1	2006	2003	2010
"white"	2	2013	2012	2013

Annual Percent Change (APC)								
Cohort	Segment	Lower EndPoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob > t
"white"	1	1999	2006	17.685^	11.296	24.441	6.599	0.000
"white"	2	2006	2013	3.189	-1.661	8.278	1.475	0.174
"white"	3	2013	2015	78.700^	50.424	112.290	7.624	0.000

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

- The statistic could not be calculated.

"synth" \ "white", Number of Joinpoints: 2 (Final Selected Model) continued...

Average Annual Percent Change (AAPC)								
Cohort	Range	Lower EndPoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic *	P-Value *
"white"	Full Range	1999	2015	17.063^	13.196	21.063	9.191	0.000

^ Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level. Parametric method used to calculate CIs.

* If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used.

- The statistic could not be calculated.

Test for Number of Joinpoints								
Cohort	Test Number	Null Hypothesis	Alternate Hypothesis	Number Degrees of Freedom	Denominator Degrees of Freedom	Number of Permutations	P-Value	Significance Level ~
"white"	#1	0 Joinpoint(s)	3 Joinpoint(s) *	6	9	10000	0.0001000	0.0166667
"white"	#2	1 Joinpoint(s)	3 Joinpoint(s) *	4	9	10000	0.0018000	0.0250000
"white"	#3	2 Joinpoint(s) *	3 Joinpoint(s)	2	9	10000	0.6829000	0.0500000

Final Selected Model: "white" - 2 Joinpoint(s)

* Final Selected Model

~ Significance level for individual test