



# BRIEFING

Briefing No. 64

February 2004

## January 2004 Spatial Basis Report

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**Objective**

**Analysis**

**for Informed**

**Decision Making**

This report provides an analysis of regional grain prices in the U.S. for major grain commodities during January 2004. The basis, defined as the difference between a cash price and the price in the futures market, signifies the price for a specific commodity on a local level and captures the impact of local demands, local supplies and transportation structure. Maps displayed in the following report show estimated basis prices for corn, soybeans, hard red winter (HRW) wheat, soft red winter (SRW) wheat, and hard red spring (HRS) wheat.

Daily cash prices and basis prices from over 2,200 U.S. grain markets were collected provided by the *CashGrainBids.Com* data service. A monthly average for January 2004 was computed for each location and commodity. The basis is computed as the difference between the local cash price and the corresponding March futures contract price for each commodity. These monthly average basis values are then used in the analysis. All prices and basis levels reported here are in cents per bushel.

Geostatistical kriging procedures were used to estimate a basis 'surface' which provides an estimate of the basis for observed and unobserved locations. A point on each map denotes locations where prices are observed for a specific commodity. Readers should be cautious in interpreting basis estimates in regions of the country where no basis prices are available.

Current basis levels by location were also compared to the basis in the previous month (December 2003) and in the

previous year (January 2003). Kriging methods were used to estimate the monthly and yearly change in basis over space.

### Futures Market Trends for January 2004

Grain and soybean futures were firmer in January on the heels of strong export demand and dwindling world stocks. For the month, March soybean futures gained nearly 50 cents per bushel and is up \$2.50 per bushel since last year. Wheat futures were stronger in Kansas City and Minneapolis, but mostly the same in Chicago. Corn futures were also up nearly 20 cents for the month.

**Table 1: Monthly Average Future Prices: Cents per bushel**

	Jan 04	Dec 03	Jan 03
March Corn Futures	267	248	236
March Soybean Futures	822	774	564
March SRW Wheat CBT Futures	390	390	319
March HRW Wheat KCBT Futures	398	392	351
March HRS Wheat MGE Futures	407	396	379

## **Basis Trends for January 2004**

### Corn Basis

Corn basis was slightly weaker in January as compared to December. On average across the 2,128 markets corn basis levels slipped 2 cents a bushel over the past month. Much of the weakness was concentrated in the Mississippi River region where basis levels fell by 5 cents or more, driven by an 8 cent drop in the basis at the Gulf Port area.

Year-to-year basis levels for corn were 8 cents lower on average across the 967 corn markets reporting prices in January 2004 and January 2003. However, areas along the Mississippi river saw modest basis improvements compared to last year, while regions in the far West and Eastern seaboard were off as much as 15 cents or more compared to last year thanks to higher

production in 2003. Basis levels at the Gulf are off 5 cents for the year.

### Soybean Basis

Soybean basis was mostly unchanged between December and January, even though futures prices managed an impressive 50 cent rally for the month. Some modest strengthening in basis occurred in the Eastern Cornbelt and the Mid-Atlantic. At the Gulf, soybean basis levels slipped by 1 cent a bushel between December and January.

For the year, current soybean basis levels are off 8 cents a bushel on average across the 912 markets reporting in 2003 and 2004. Regionally, basis levels for the year are generally weaker by 15 cents a bushel in the Eastern Cornbelt and the Southeast, while parts of the Western Cornbelt and Plains are seeing soybean basis levels that are mostly 10 to 15

cents lower as compared to last year. At the Louisiana Gulf export market, soybean basis is running 14 cents below last year's level.

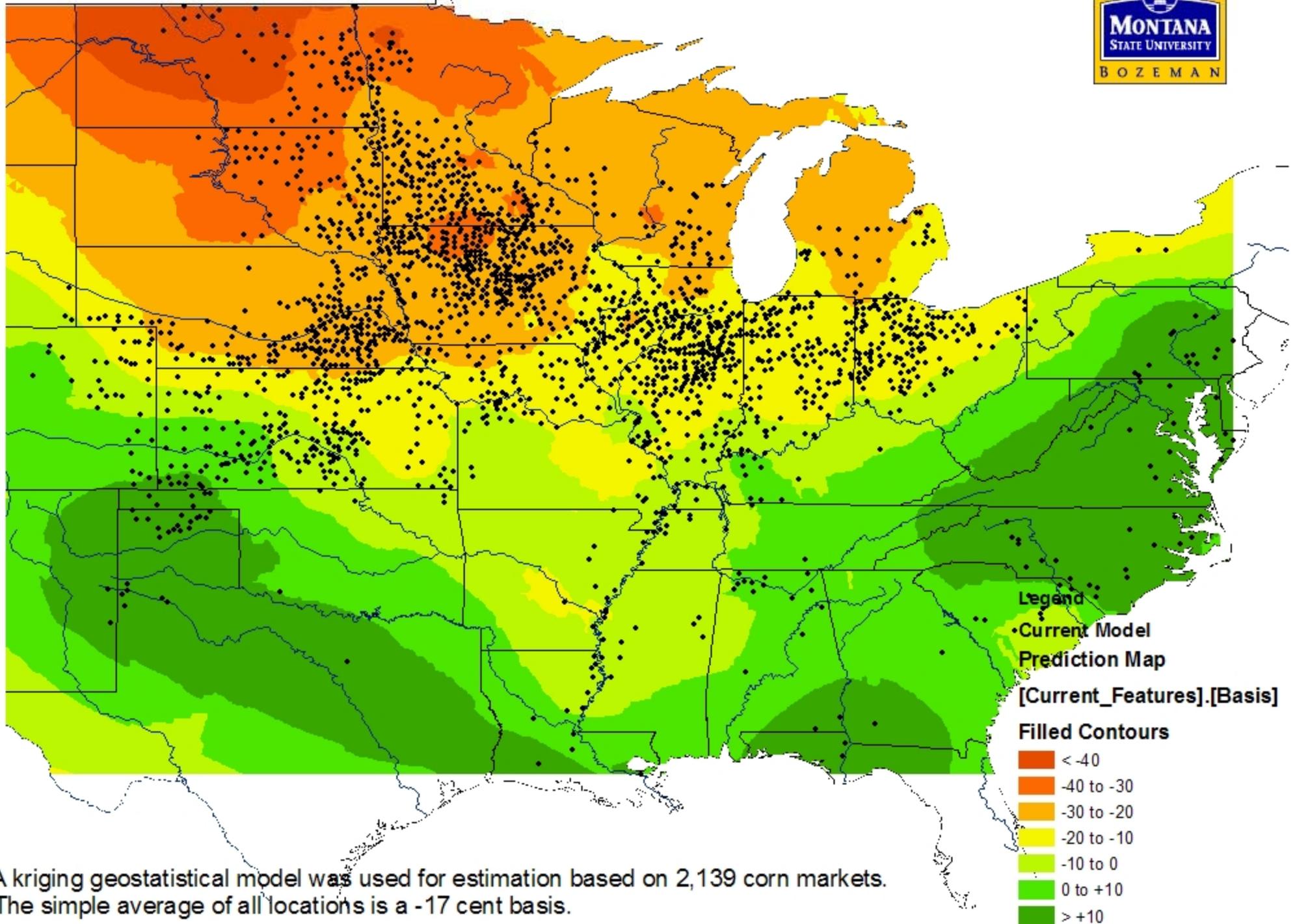
### Wheat Basis

Basis and futures for wheat moved in opposite directions in January. Both HRS and HRW futures markets managed solid gains for January, but the basis markets for these wheat classes were generally lower. Conversely, SRW wheat futures were unchanged for January, but basis levels managed a modest gain of 3 cents a bushel.

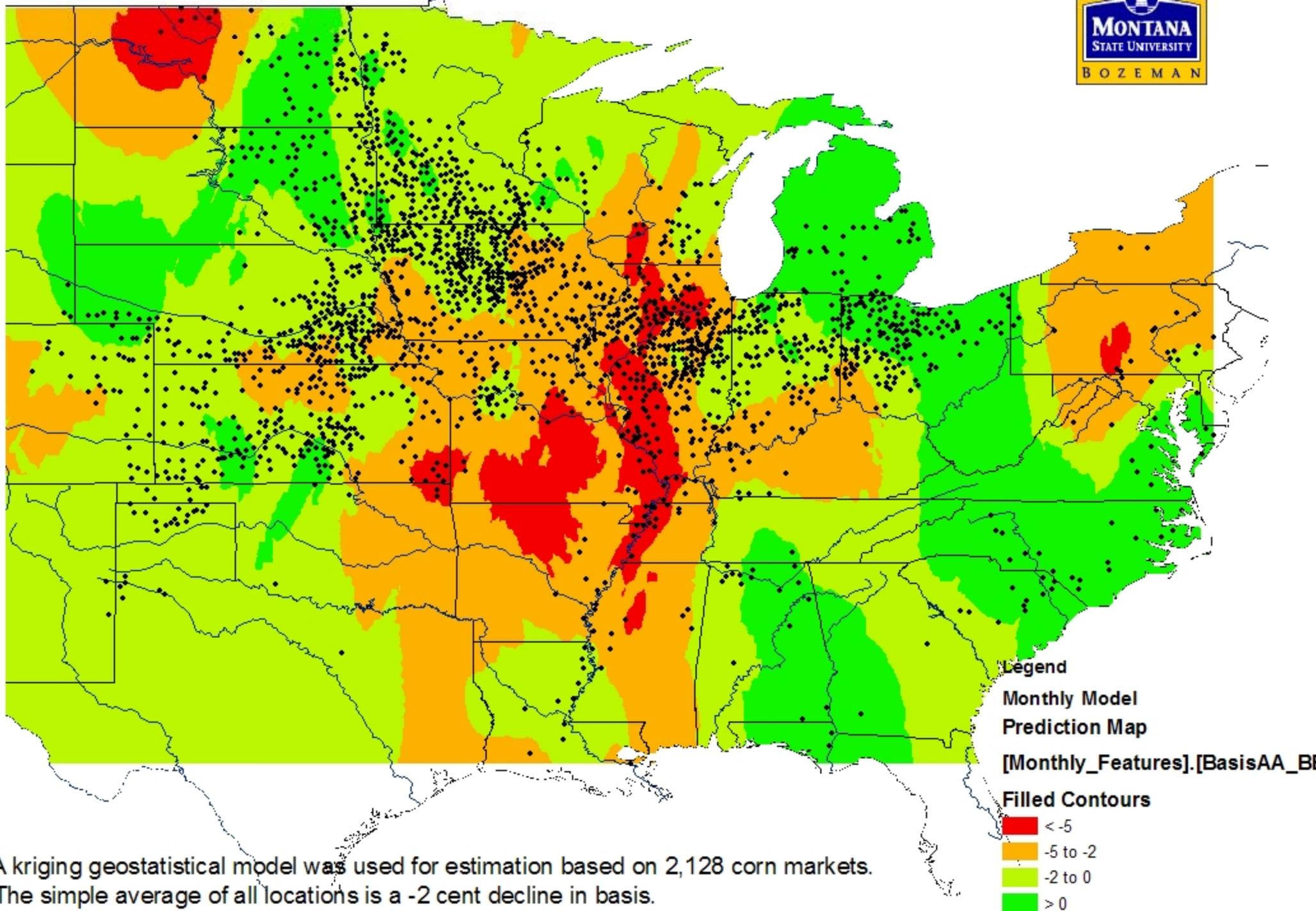
Basis.

Comparing year-to-year basis patterns, wheat basis levels are generally weaker by 14 to 26 cents a bushel with a large increase in 2003 wheat production.

# Corn Basis for January 2004

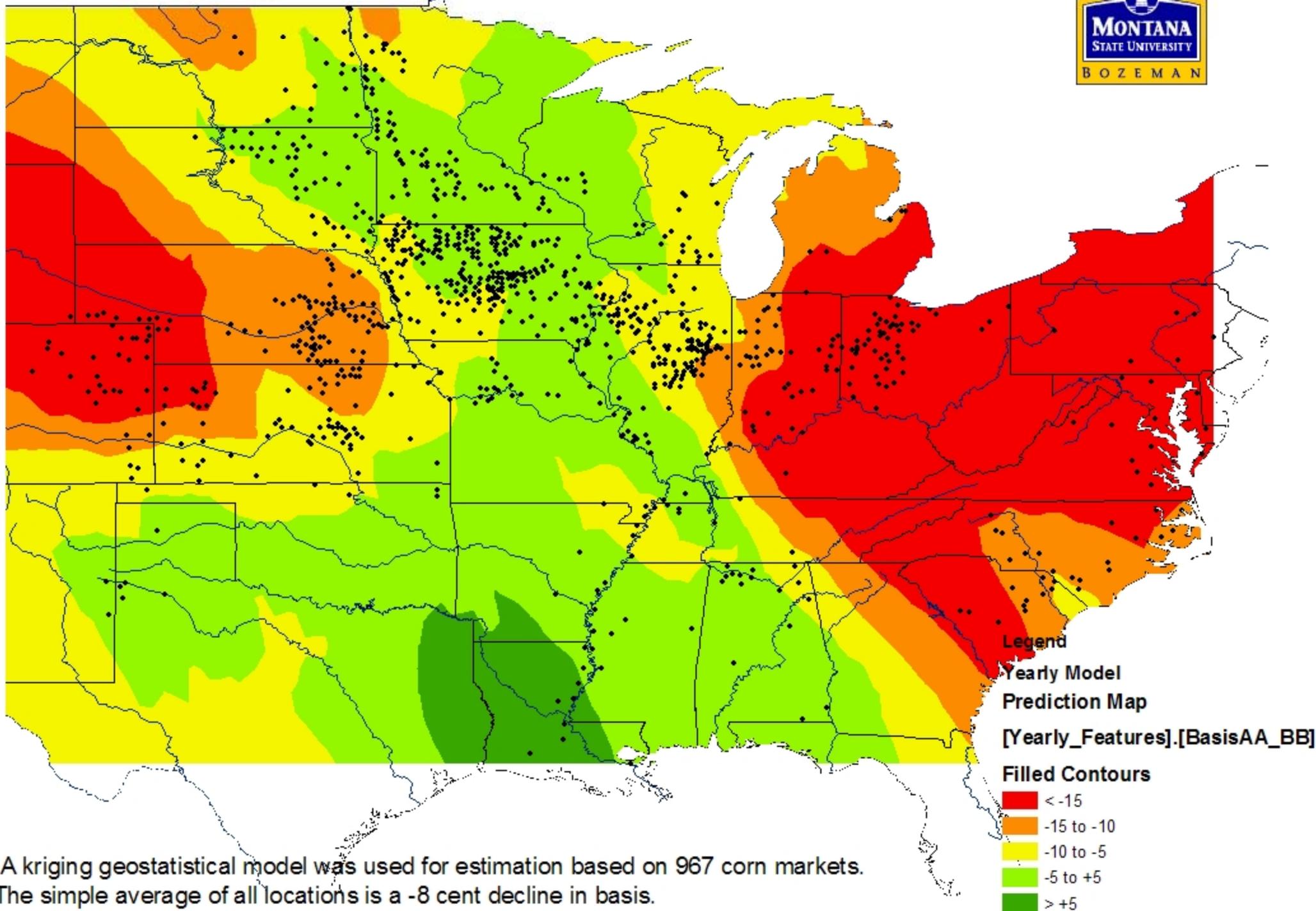


# Change in Corn Basis: Jan 2004 - Dec 2003



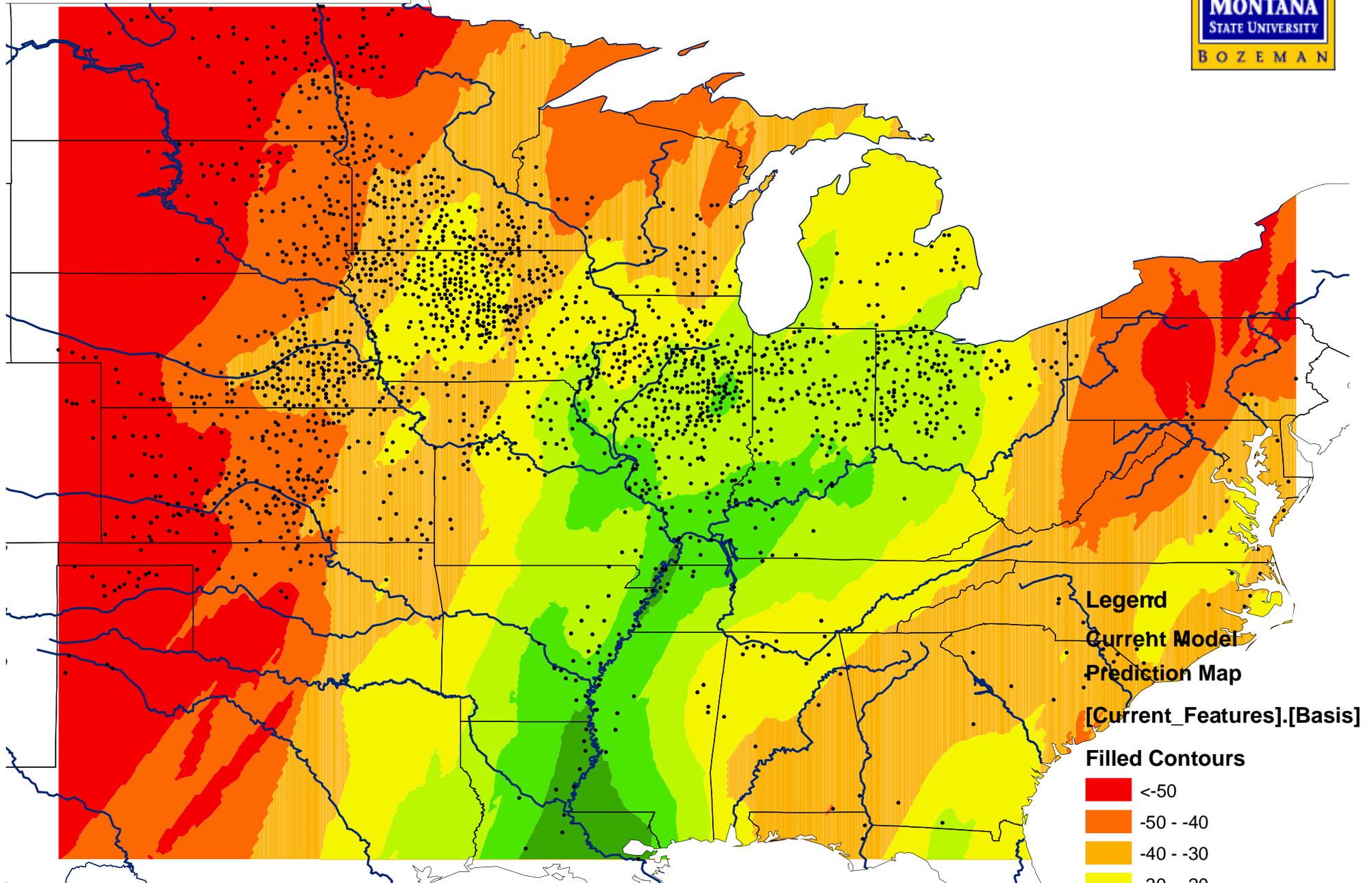
A kriging geostatistical model was used for estimation based on 2,128 corn markets. The simple average of all locations is a -2 cent decline in basis.

# Change in Corn Basis: Jan 2004 - Jan 2003



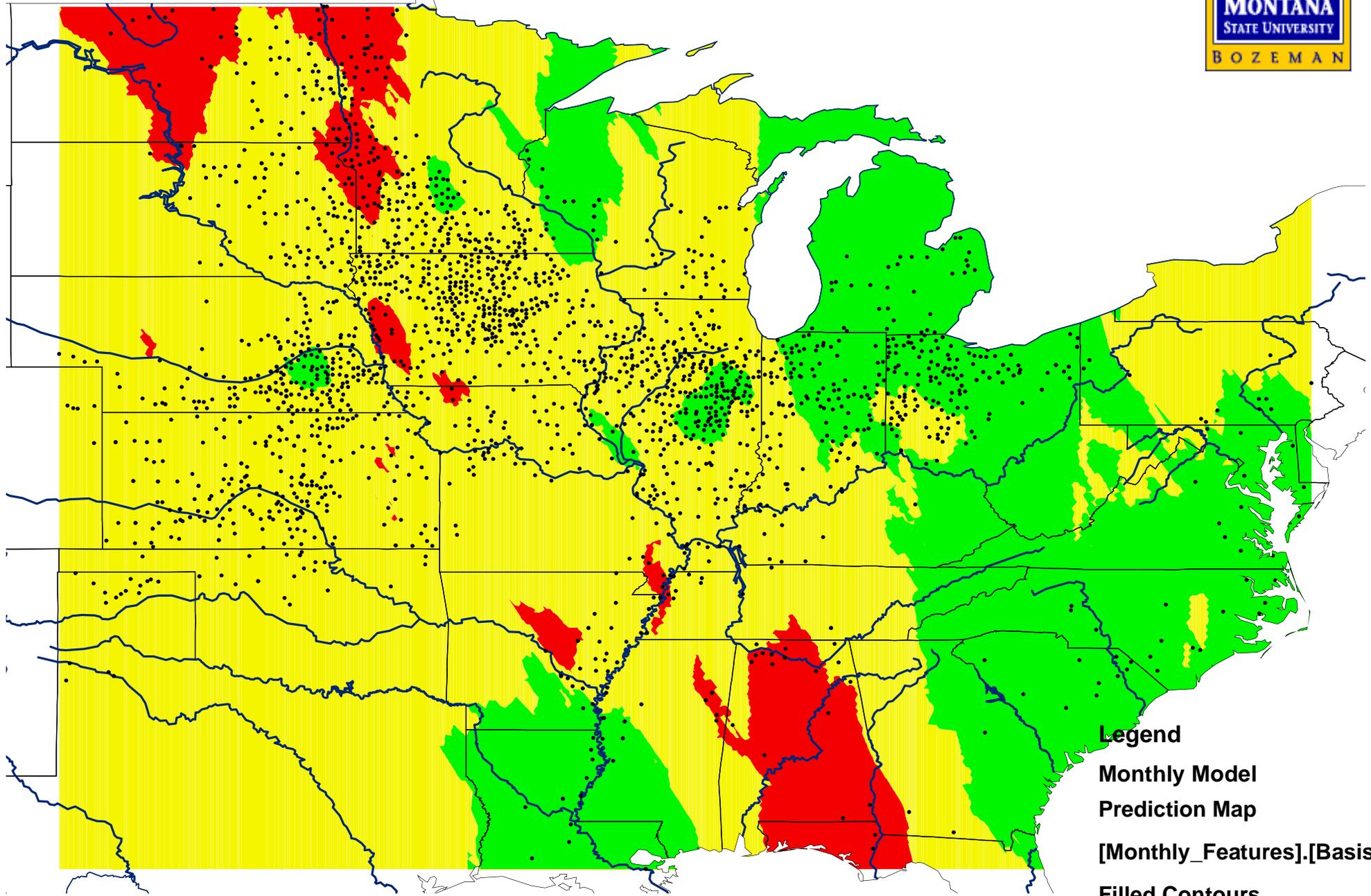
A kriging geostatistical model was used for estimation based on 967 corn markets. The simple average of all locations is a -8 cent decline in basis.

# Soybean Basis for January 2004



A kriging geostatistical model was used for estimation based on 2,031 soybean markets. The simple average of all locations is a -30 cent basis.

# Change in Soybean Basis: Jan 2004 - Dec 2003



### Legend

Monthly Model  
Prediction Map

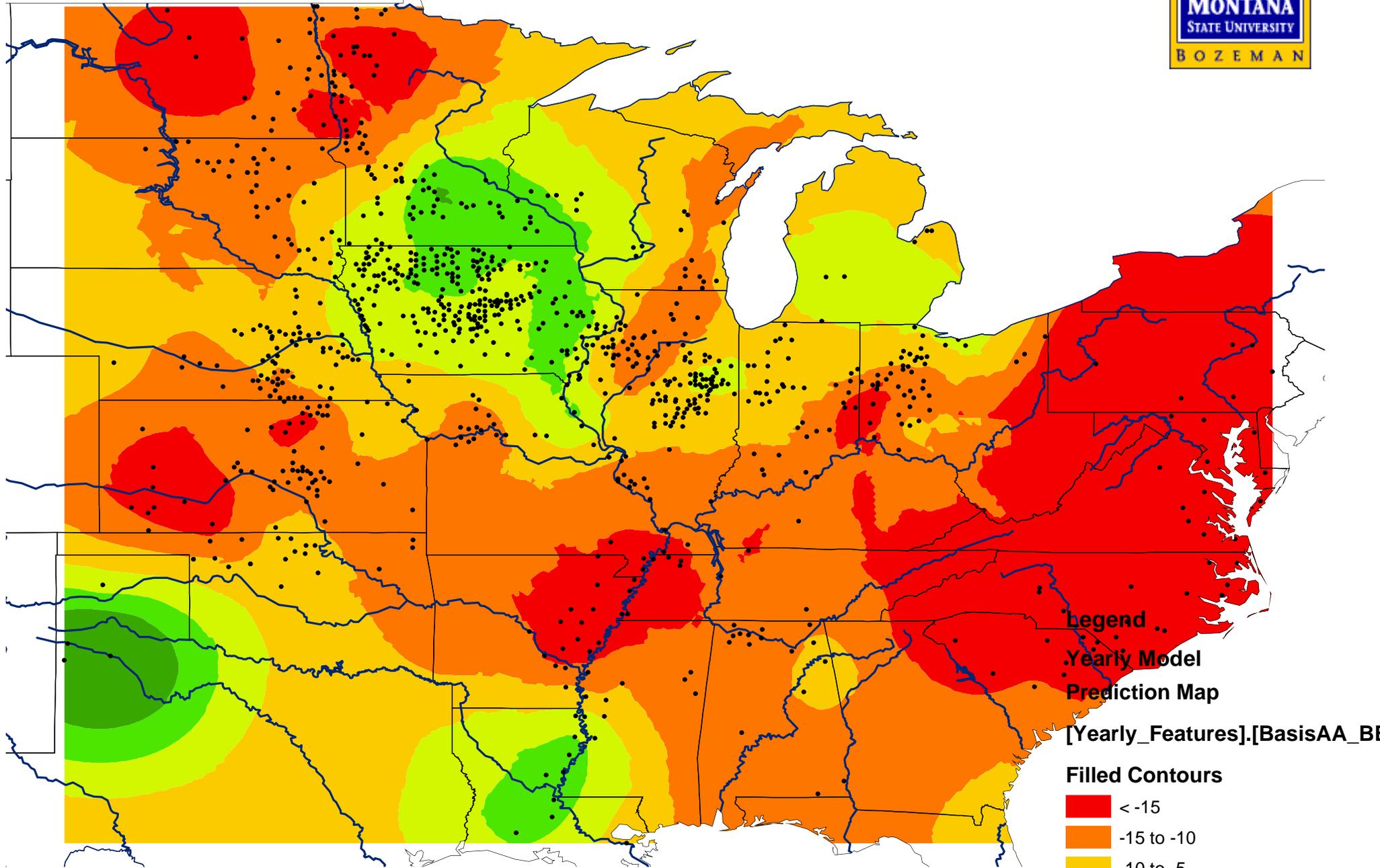
[Monthly\_Features].[BasisAA\_1

### Filled Contours

-  < -2
-  -2 to +2
-  > +2

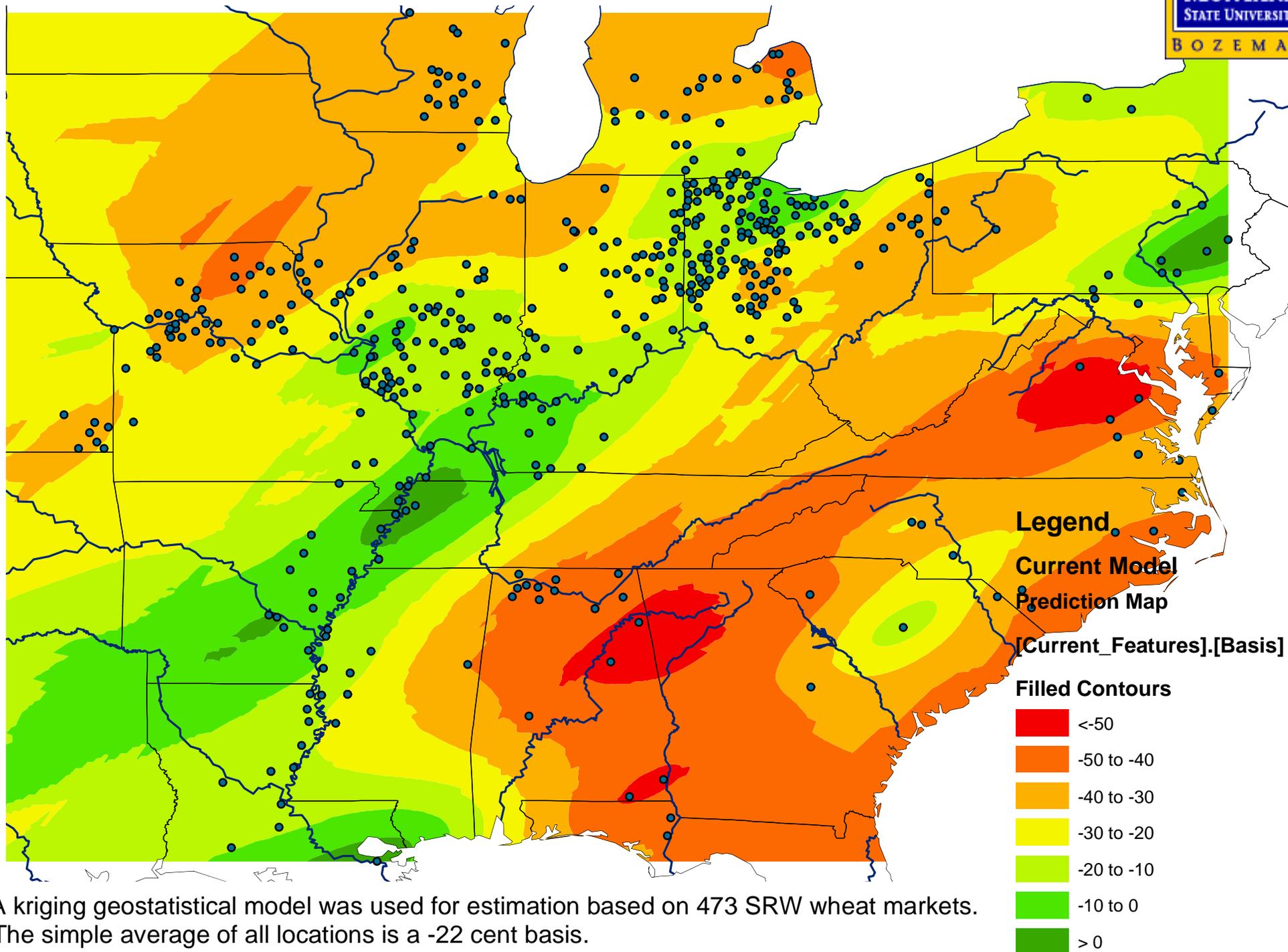
A kriging geostatistical model was used for estimation based on 2,016 soybean markets. The simple average of all locations is no change in basis.

# Change in Soybean Basis: Jan 2004 - Jan 2003



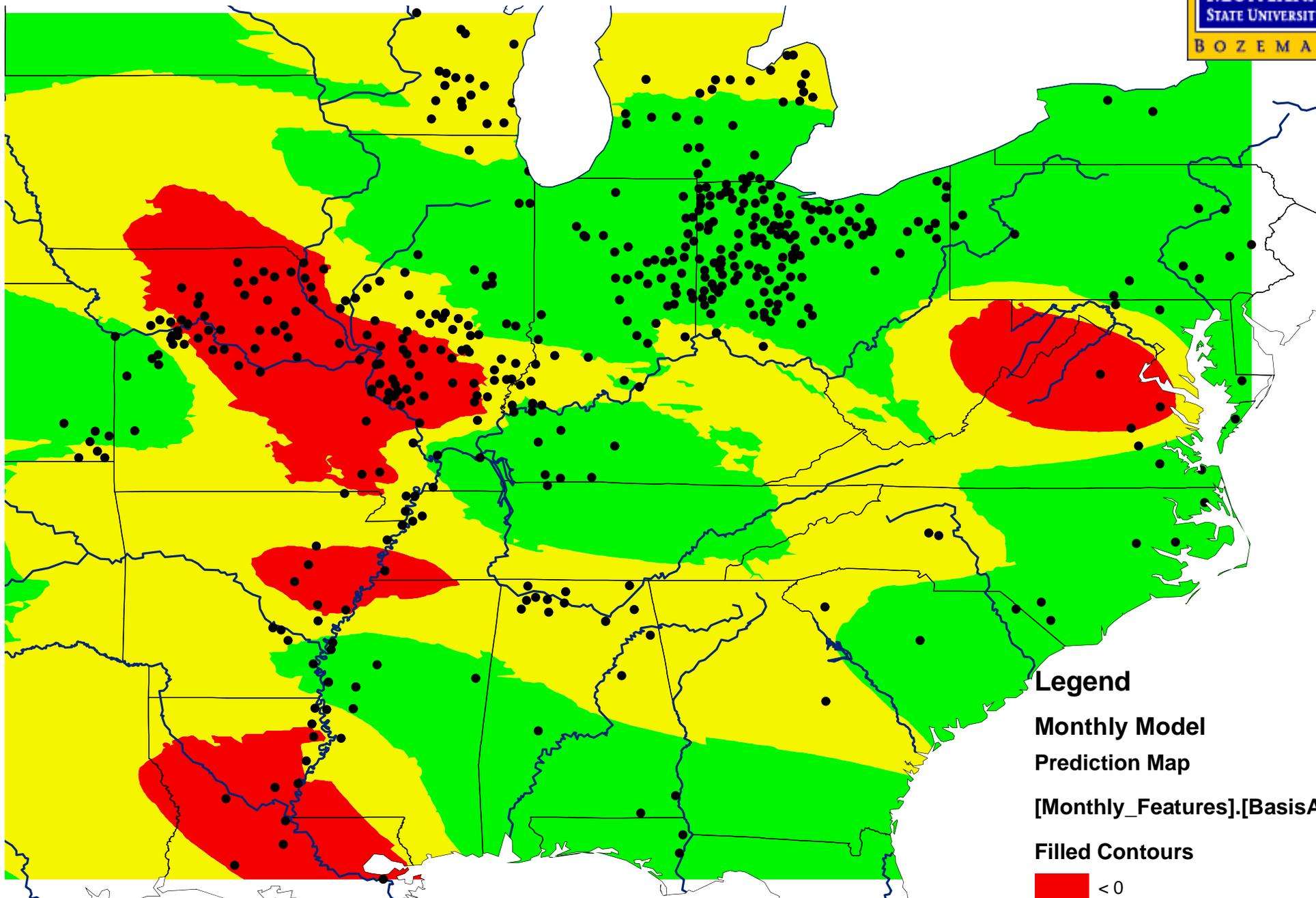
A kriging geostatistical model was used for estimation based on 912 soybean markets.  
The simple average of all locations is a 8 cent decline in basis.

# SRW Wheat Basis for January 2004



A kriging geostatistical model was used for estimation based on 473 SRW wheat markets. The simple average of all locations is a -22 cent basis.

# Change in SRW Wheat Basis: Jan 2004 - Dec 2003



**Legend**

**Monthly Model Prediction Map**

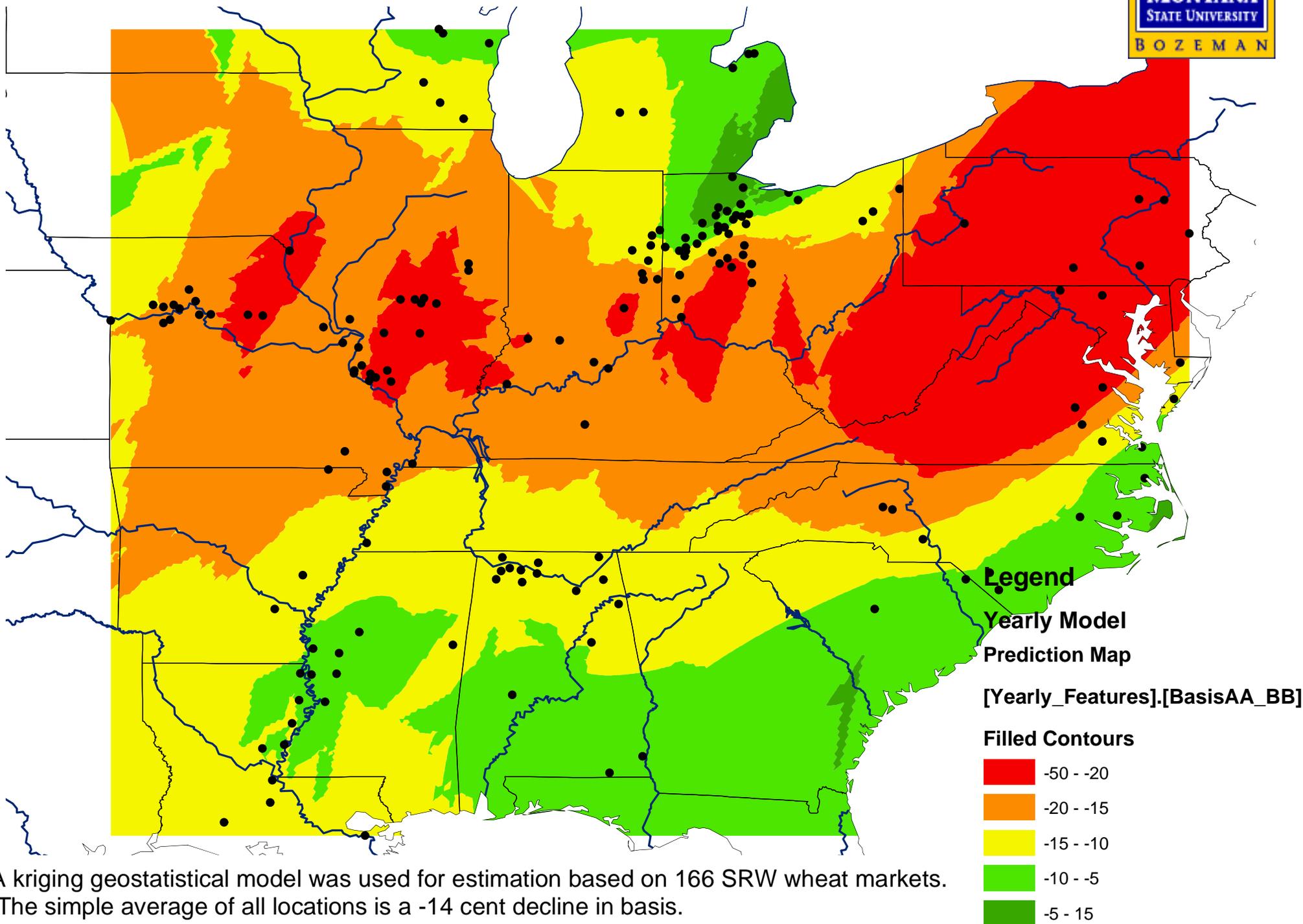
[Monthly\_Features].[BasisAA\_BB]

**Filled Contours**

- < 0
- 0 to +3
- > +3

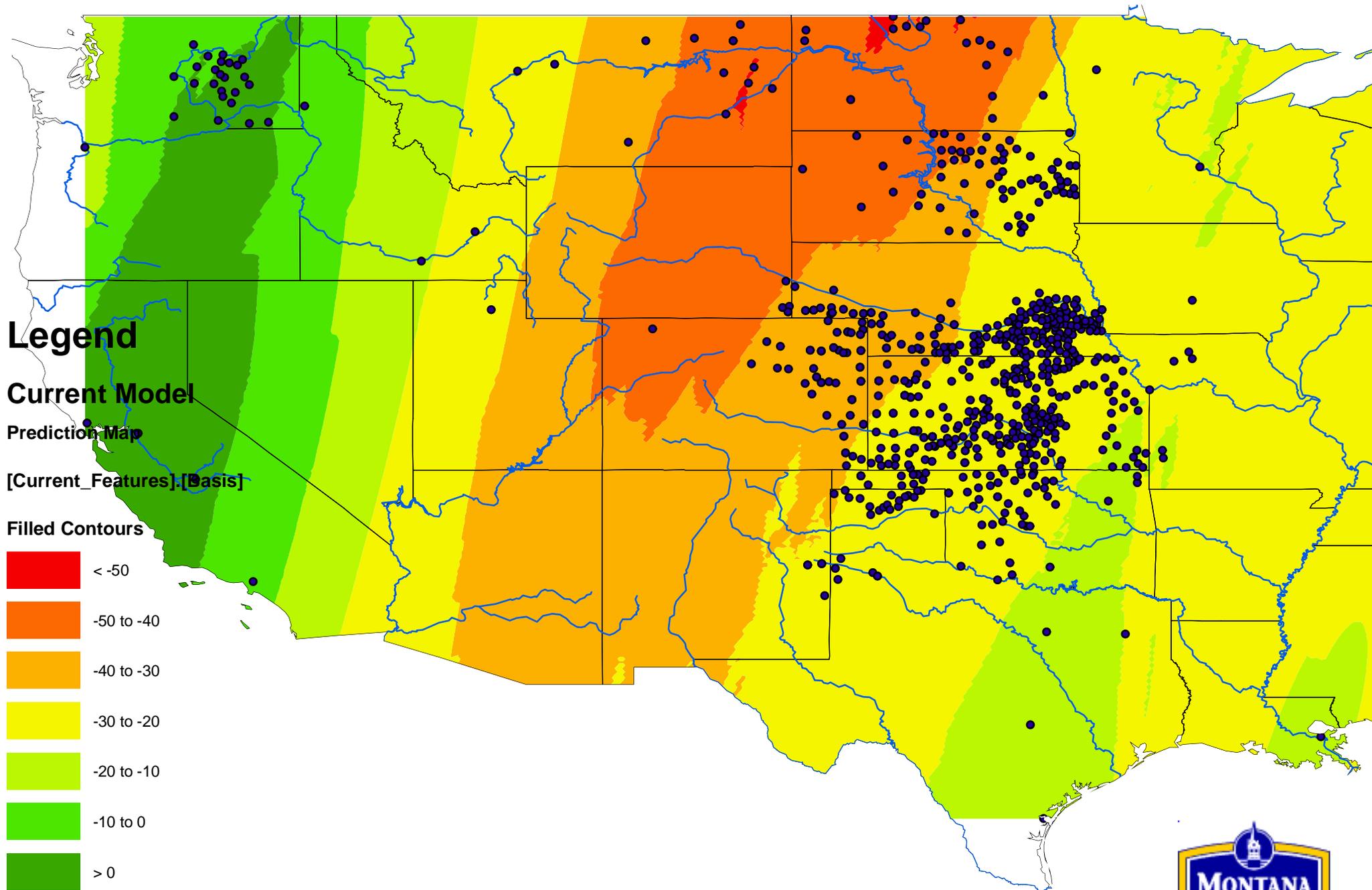
A kriging geostatistical model was used for estimation based on 459 SRW wheat markets. The simple average of all locations is a +3 cent increase in basis.

# Change in SRW Wheat Basis: Jan 2004 - Jan 2003



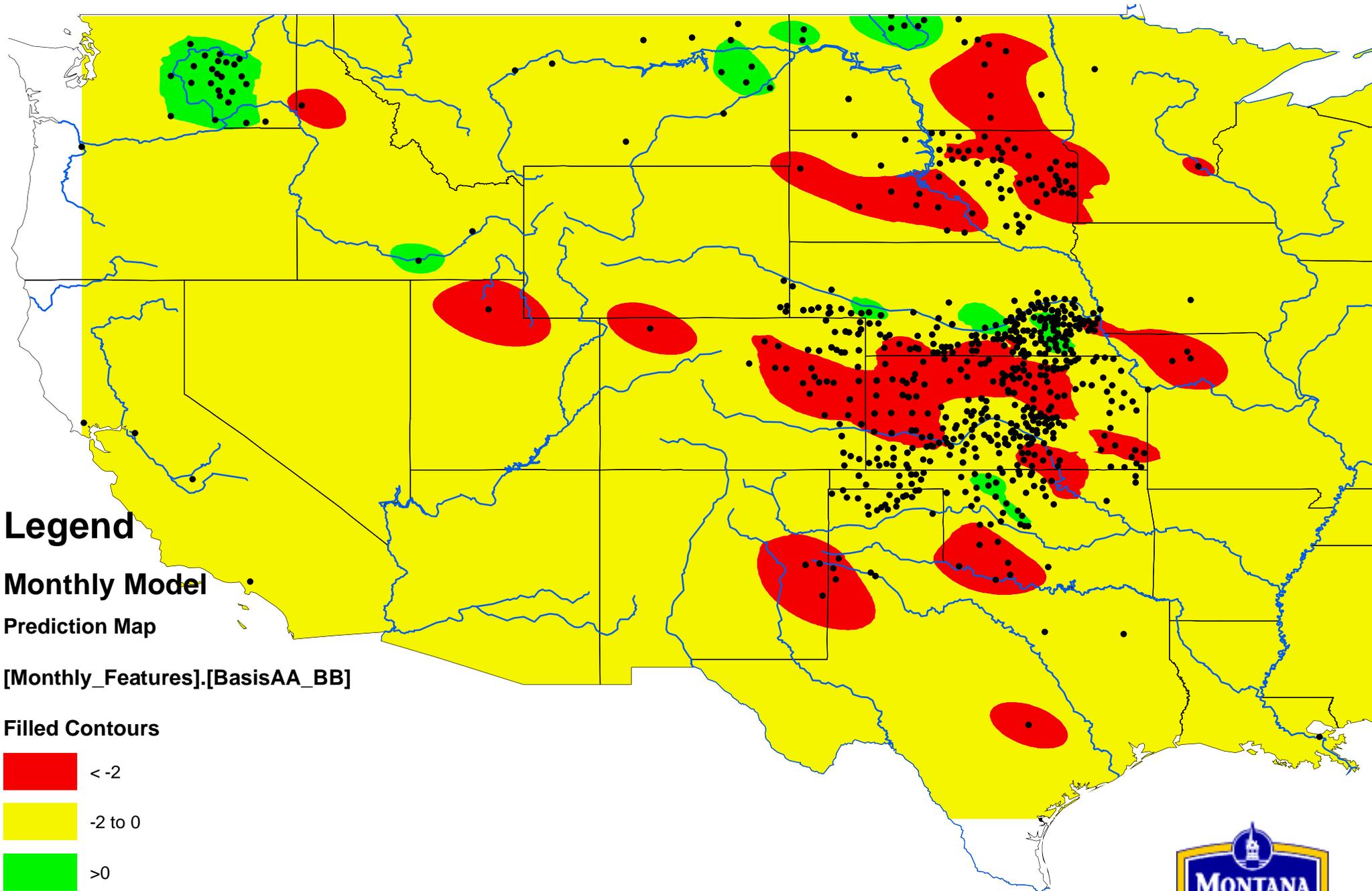
A kriging geostatistical model was used for estimation based on 166 SRW wheat markets. The simple average of all locations is a -14 cent decline in basis.

# HRW Wheat Basis for January 2004



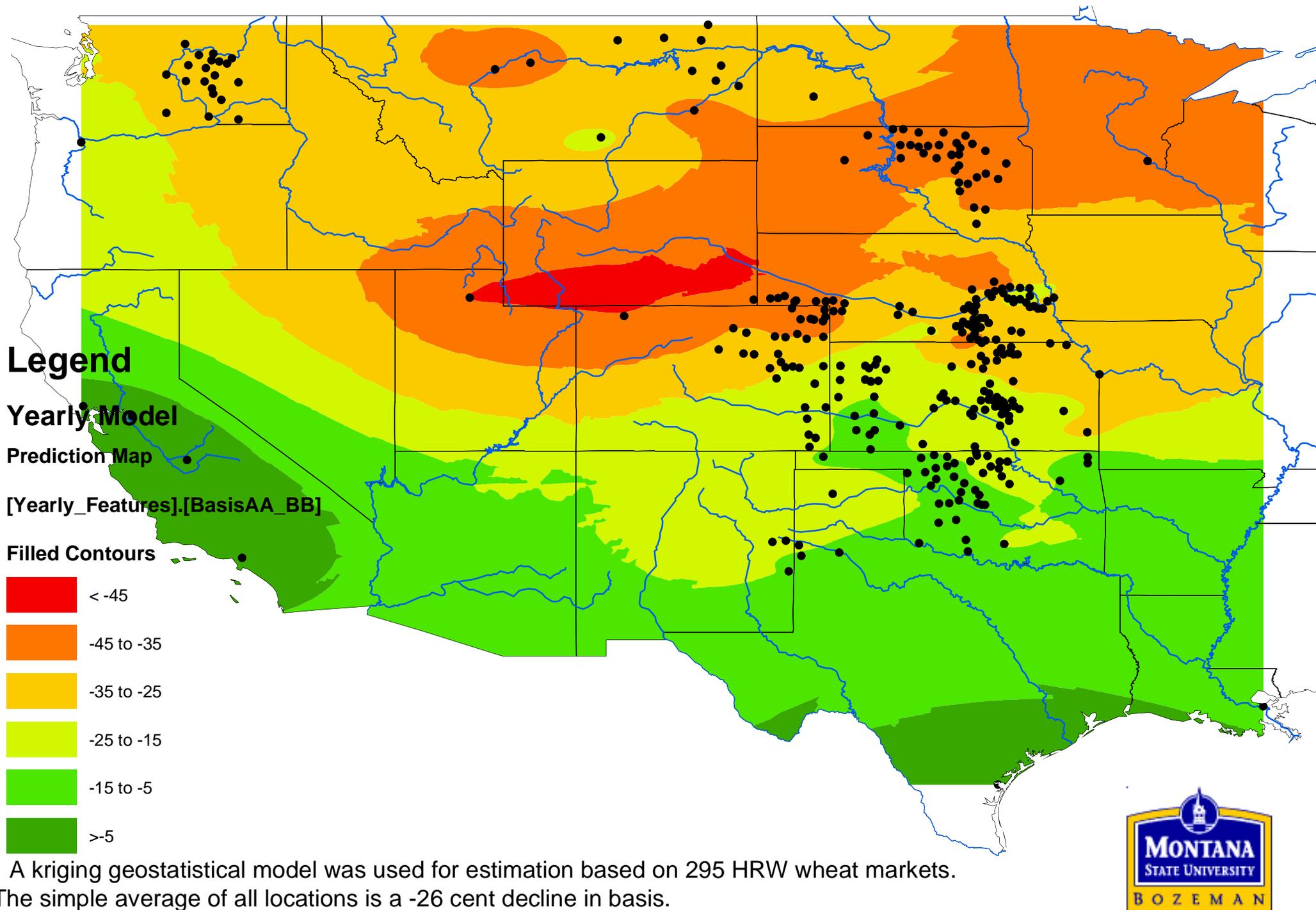
A kriging geostatistical model was used for estimation based on 639 HRW wheat markets.  
The simple average of all locations is a -27 cent basis.

# Change in HRW Wheat Basis: Jan 2004 - Dec 2003

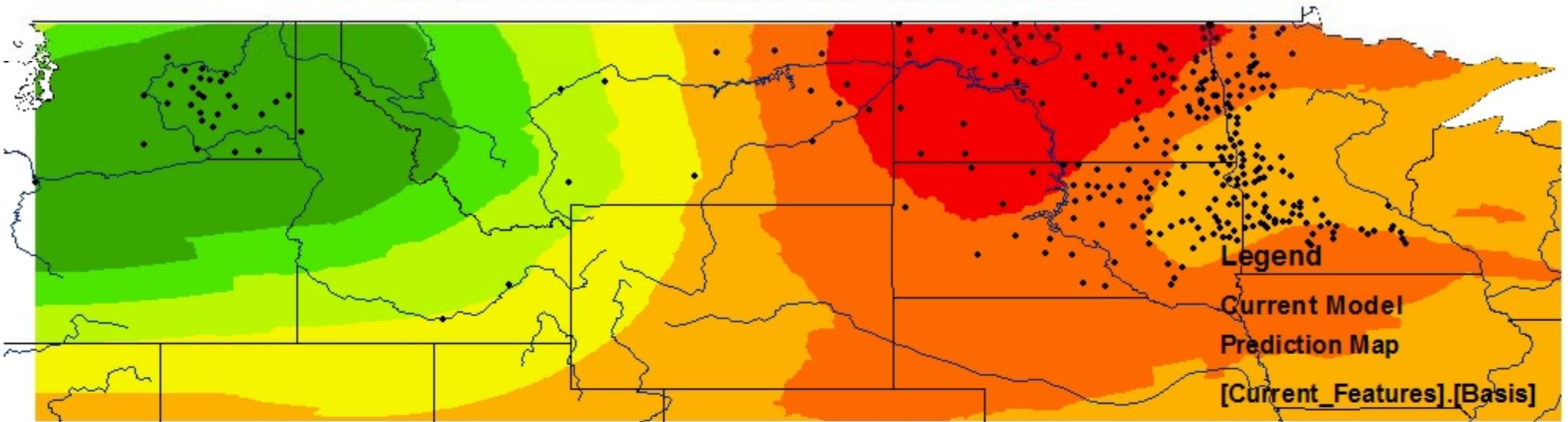


A kriging geostatistical model was used for estimation based on 632 HRW wheat markets.  
The simple average of all locations is a -1 cent decline in basis.

# Change in HRW Wheat Basis: Jan 2004 - Jan 2003



# HRS Wheat Basis for Jan 2004

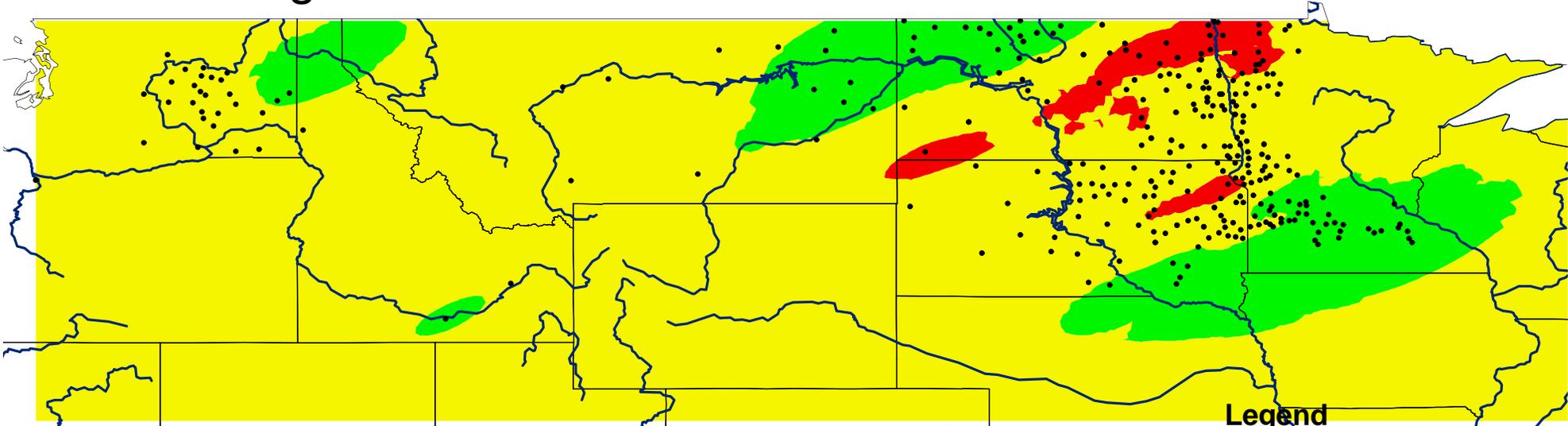


A kriging geostatistical model was used for estimation based on 293 HRS wheat markets.  
The simple average of all locations is a -26 cent basis.

## Filled Contours



# Change in HRS Wheat Basis: Jan 2004 - Dec 2003



## Legend

Monthly Model  
Prediction Map

[Monthly\_Features].[BasisAA\_BB]

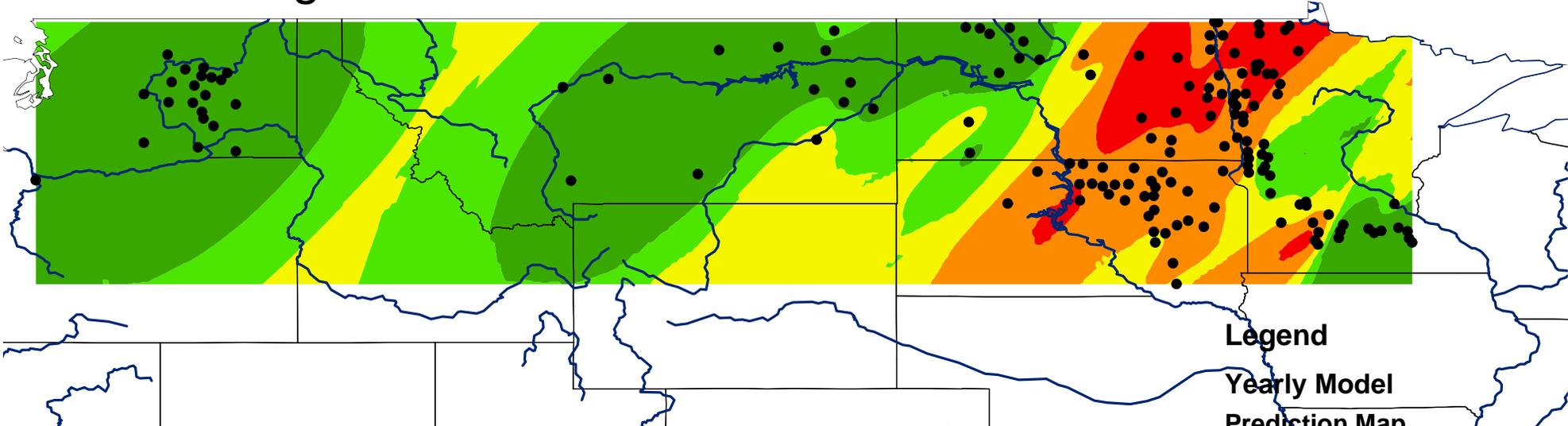
## Filled Contours

- < -6
- 6 to -2
- > -2

A kriging geostatistical model was used for estimation based on 290 HRS wheat markets. The simple average of all locations is a -4 cent decline in basis.



# Change in HRS Wheat Basis: Jan 2004 - Jan 2003



## Legend

Yearly Model  
Prediction Map

[Yearly\_Features].[BasisAA\_BB]

## Filled Contours

- < -25
- 25 to -20
- 20 to -15
- 15 to -10
- > -10

A kriging geostatistical model was used for estimation based on 153 HRS wheat markets. The simple average of all locations is a -16 cent decline in basis.

