



## WEEKLY PETROLEUM SUPPLY-DEMAND TRENDS

### A Fundamental Petroleum Trends Weekly Report

Lehi German Tel: 816.505.0980 [www.fundamentalpetroleumtrends.com](http://www.fundamentalpetroleumtrends.com) Wednesday, May 18, 2011

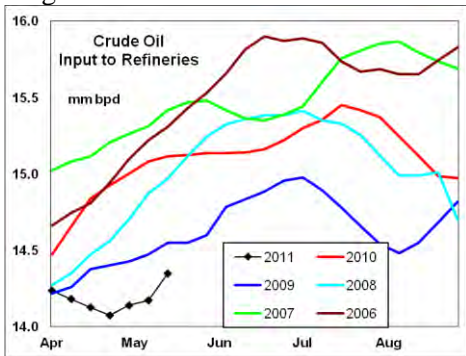


#### Major Fundamental Trends<sup>1</sup>

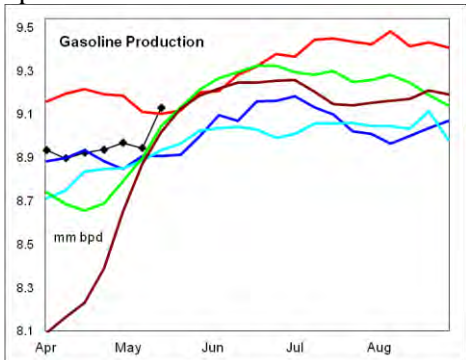
Compared to a year ago, the latest 4-wk combined gasoline and distillate demand was -322,000 bpd lower. For this first time in 2011, distillate demand fell below year ago levels.

High retail prices, high unemployment and weak economic growth are the factors that underlie this lackluster demand level. Mississippi River floods have likely disrupted exports, contributing to the recent weakness in weekly wholesale demand.

Crude oil refinery input increased +239,000 bpd last week, however the level remains well below the 5-year range.

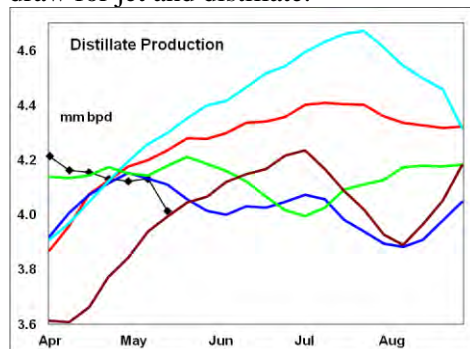


Gasoline production jumped +255,000 bpd on the week, with increases in all regions except the West Coast, as downstream process units returned to operation.



Refiners maximized gasoline output last week at the expense of middle distillates, with production levels of both jet fuel and distillate matching 5-

year lows. The low level of supply led to -1.8 million barrel combined stock draw for jet and distillate.



Crude oil stocks reached record highs for this time of year last week as a result of the very low refinery run rates.

Unexpected wildfires in the Canadian tar sands region has the potential to tighten the supply balance in PADD 2, where stocks ended the week +10.4 million barrels above the prior record high.

**Demand** for gasoline and jet fuel were each sharply higher on the week, will distillate extended the seasonal downtrend.

Wholesale demand (including exports) measured over the last four weeks compared to a year ago: gasoline decreased -2.3%; distillate down -2.9%; jet fuel up +2.1% while residual fuel oil increased +7.1%.

**Stocks forward coverage:** Gasoline demand coverage trended lower on the jump in demand while stocks were nearly unchanged. Coverage levels were above the mid range.

Distillate coverage increased on continued steep declines in demand, partially offset by a +1.2 million barrel stock draw. Coverage levels were well below the last 2-years.

Jet fuel coverage decreased on a -0.7 million barrel stock draw and a spike in demand. Coverage levels were below the last 2-years.

**Refinery utilization** rates increased on a +239,000 rise in crude oil thru put, but the level remains well below the 5-year range.

Gasoline yield % on crude oil runs

jumped on a +255,000 bpd increase in output compared to the +239,000 bpd increase in crude oil runs. The yield % on crude oil runs was a record high.

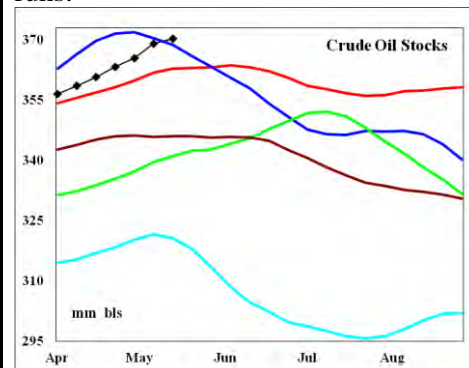
Distillate yield % on crude oil runs decreased on a -169,000 bpd decrease in output compared to the increase in crude oil runs. Yield % level fell to the 5-year mid range.

Jet fuel yield % on crude oil runs was nearly unchanged on a +22,000 bpd increase in production, compared to the increase in crude oil runs. The yield % on crude oil runs was above the mid range.

**Petroleum Imports** fell a combined -0.9 million bpd last week for crude oil and major refined fuels; due in part to Mississippi River flooding that disrupted waterborne receipts.

During the latest 4-wk period crude oil imports decreased -0.9 million bpd below last year; distillate imports decreased -64,000 bpd; finished gasoline imports decreased -6,000 bpd, gasoline blend stock imports increased +108,000 bpd; jet fuel imports were up +9,000 bpd, while residual fuel oil imports decreased -25,000 bpd.

**Crude Oil** stocks were unchanged on the week with a +1.9 million barrel build on the West Coast offset by a -1.6 million barrel draw in Cushing. Stock levels are at a seasonal high and should trend lower as refiners ramp up thru put over the next 30-days. Imports remain exceptionally low on higher domestic production and low runs.



<sup>1</sup> Source is latest EIA Weekly Statistics



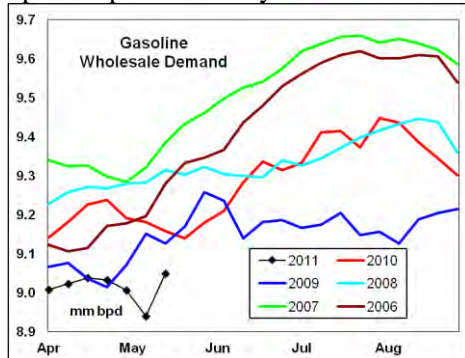
## WEEKLY PETROLEUM SUPPLY-DEMAND TRENDS

### A Fundamental Petroleum Trends Weekly Report

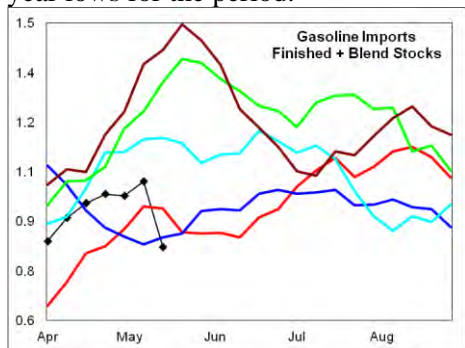
Lehi German Tel: 816.505.0980 [www.fundamentalpetroleumtrends.com](http://www.fundamentalpetroleumtrends.com) Wednesday, May 18, 2011

#### Product Supply-Demand Trends

**Gasoline** demand increased +222,000 bpd on the week. The latest 4-wk average demand was down -210,000 bpd compared to last year.



Production increased +255,000 bpd on the week, with output higher in all regions except the West Coast. Higher production was offset by a -351,000 bpd drop in imports, which fell to 5-year lows for the period.



Stocks increased +0.1 million barrels on the week, to a level at the mid range. The latest 4-wk stock build East of the Rockies was greater than four of the last 5-years.

*Demand remains exceptionally weak, off 2.3% from a year ago for the latest 4-wk period on very high retail prices and high unemployment.*

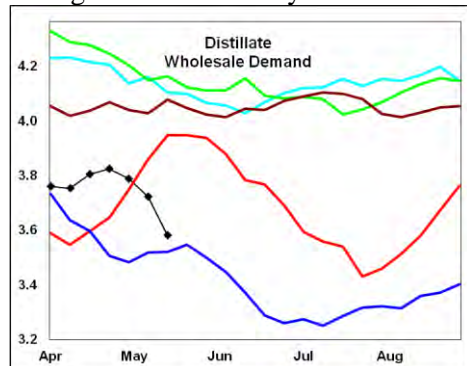
*Expect production to increase as refiners return from maintenance, limited in the short term by crude supply disruptions due to Mississippi River flooding. The recent sharp drop in gasoline prices has reduced import economics, so that import levels should moderate.*

*Look for the supply balance to gradually improve, with potential for regional market tightness in the near term.*

**Distillate** demand declined -149,000 bpd last week. The latest 4-wk average demand was -112,000 bpd below last year, the first year-on-year decline in 2011.

Supply declined -223,000 bpd on the week, with both production and imports lower. Supply levels fell to record lows for this time of year.

Stocks decreased -1.2 million barrels on the week, with the level falling below the last 2-years.



The latest 4-wk stock change in PADDs 1+2+3 was a draw of -4.8 million barrels, a record high draw for this time of year.

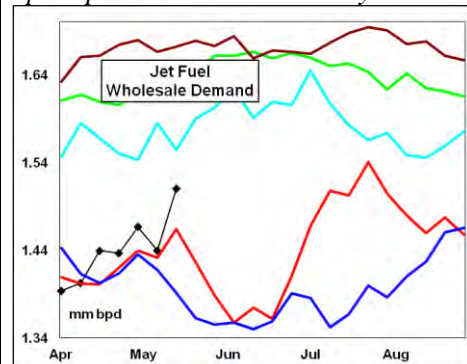
*Very weak distillate demand, constrained in part by the Mississippi River flood limiting exports, has been more than offset by extremely low output.*

*Expect output to increase as refiners return from maintenance, although Mississippi Floods may constrain production on crude oil supply disruptions through month end. Jet Fuel* demand jumped +175,000 bpd on the week, a level above the last 2-years. The latest 4-wk average demand was +31,000 bpd above last year.

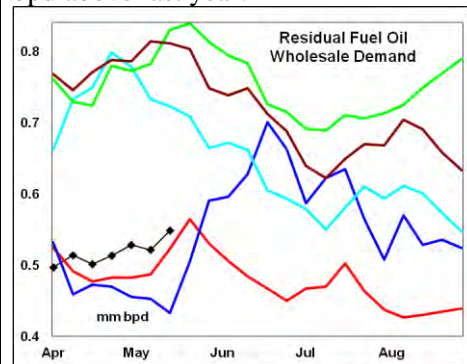
Supply increased +52,000 bpd, on higher production and imports. Stocks fell -0.7 million barrels, to record low levels.

*Jet stocks and production are at 5-year lows in PADDs 3 and 5, while other regions are well supplied. Demand remains comparable to levels of the last 2-years. Supply remains near 5-year lows on very low production.*

*Expect cash basis to remain high in major markets until refiners ramp up output over the next 45-days.*



**Residual fuel oil** demand, including exports, decreased -48,000 bpd last week, with the 4-wk average +35,000 bpd above last year.



Supply (production + imports) decreased -171,000 bpd on lower imports. The latest 4-wk average supply was -29,000 bpd below a year ago. Stocks decreased -1.3 million barrels, to a record low level for this time of year.

*Residual fuel oil stocks experienced significant declines in both PADDs 1 and 3, due in part to the Mississippi River flood that disrupted waterborne cargo movements.*

*Stock levels in PADD 1 were -25% below prior 5-year lows for the period, driven by record low production and imports. Residual fuel prices should exhibit strength in PADD 1 versus the overall energy complex.*





## WEEKLY PETROLEUM SUPPLY-DEMAND TRENDS

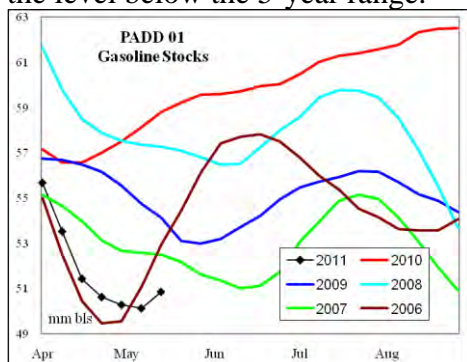
### A Fundamental Petroleum Trends Weekly Report

Lehi German Tel: 816.505.0980 [www.fundamentalpetroleumtrends.com](http://www.fundamentalpetroleumtrends.com) Wednesday, May 18, 2011

#### PADD Supply Trends

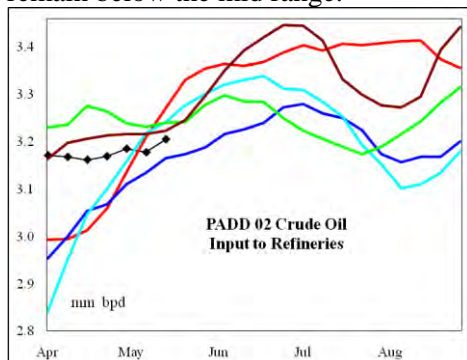
**PADD 1** refinery crude oil runs have increased +534,000 bpd during the last month, to a level near the prior year lows. Previously closed refining capacity is in process of retuning to operation which should lift run rates to levels near the 5-year mid range by early summer.

Gasoline production increased +64,000 bpd on the week, while imports decreased -123,000 bpd. Import levels matched 5-year lows on the week. Stocks decreased -0.7 million barrels on the week, with the level below the 5-year range.



Distillate supply decreased -41,000 bpd on lower imports. Stocks increased +0.4 million barrels to a level -15% below last years' high.

Jet fuel supply increased +83,000 bpd on the week, although stock levels remain below the mid range.



**PADD 2** crude oil refinery runs increased +72,000 bpd last week, to a level just below the 5-year mid range. Crude oil stocks fell -2.4 million barrels on lower receipts from the Gulf, due in part to supply disruptions caused by the Mississippi River flood. Cushing stocks fell -1.6 million

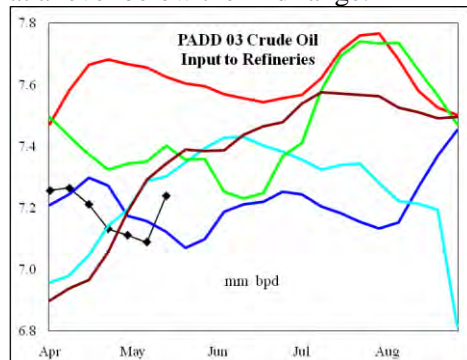
barrels, with the level +2.8 million barrels above last years' record level.

Gasoline production jumped +172,000 bpd on the week, to a level above the mid range. Stocks increased +0.5 million barrels last week, although the level remains at the low end of the 5-year range.

Distillate production decreased -71,000 bpd, to a level below the 5-year range. Stocks fell -1.3 million barrels to a level below four of the last 5-years.

Jet fuel production increased +17,000 bpd on the week to a level above the historic range. Stock levels ended the week at the mid range.

**PADD 3** crude oil runs increased +156,000 bpd last week. The latest 4-wk average thru put was -0.6 bpd below last year, and near historic lows for the period. Crude imports declined -0.5 million bpd on the week, with the level at a record low; due in part to disruptions from the Mississippi river flood. Stocks were nearly unchanged at a level below the mid range.



Gasoline production increased +114,000 bpd on the week, offset by a -141,00 bpd drop in imports; due in part to the Mississippi River flood disrupting cargo receipts. Stock levels remain below the last 3-years.

Distillate production decreased -36,000 bpd on the week, with the level above the 5-year range. Stocks increased +0.1 million barrels on the week, with the level at 5-year highs.

Jet fuel production decreased -33,000 bpd on the week, to a level that matched 5-year lows. Stock levels remain at 5-year lows.

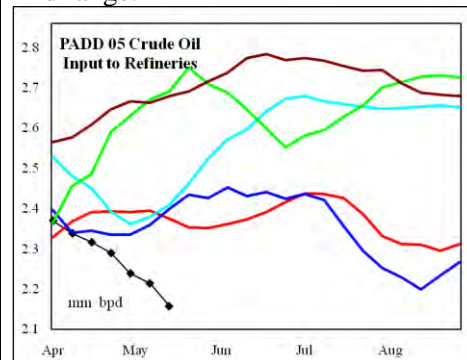
Residual fuel oil supply decreased -167,000 bpd on the week, driven by lower imports. Stocks fell -1 million barrels, although the level remains above four of the last 5-years.

**PADD 4** refinery crude runs decreased -1,000 bpd on the week, with the level matching historic lows for the period. Crude oil stock levels were below the last 2-years.

Gasoline production increased +2,000 bpd, with the level below each of the last 3-years. Stock levels remain above four of the last 5-years.

Distillate stocks were +20% above last years' record high. Production matches 5-year highs causing the market to be oversupplied.


**PADD 5** crude oil refinery runs decreased -69,000 bpd on the week, with the level at a record low. The latest 4-wk average thru put was -197,000 bpd below last year. Crude oil imports increased +18,000 bpd, leading to a +1.9 million barrel stock build. Stock levels were below the mid range.



Gasoline supply fell -93,000 bpd on the week with both production and imports lower. Supplies matched the mid range. Stocks were nearly unchanged at a level above the 5-year range.

Distillate supply fell -72,000 bpd on the week, to a record low level for this time of year. Stocks declined -0.6 million barrels, with the level still above the 5-year range.

Jet fuel production rates continue for the 5th consecutive week below the historic range, driving stock levels to the low end of the 5-year range.



FUNDAMENTAL

PETROLEUM TRENDS

?

PETROLEUM: Graph Link and Weekly Summary

A Fundamental Petroleum Trends Weekly Report

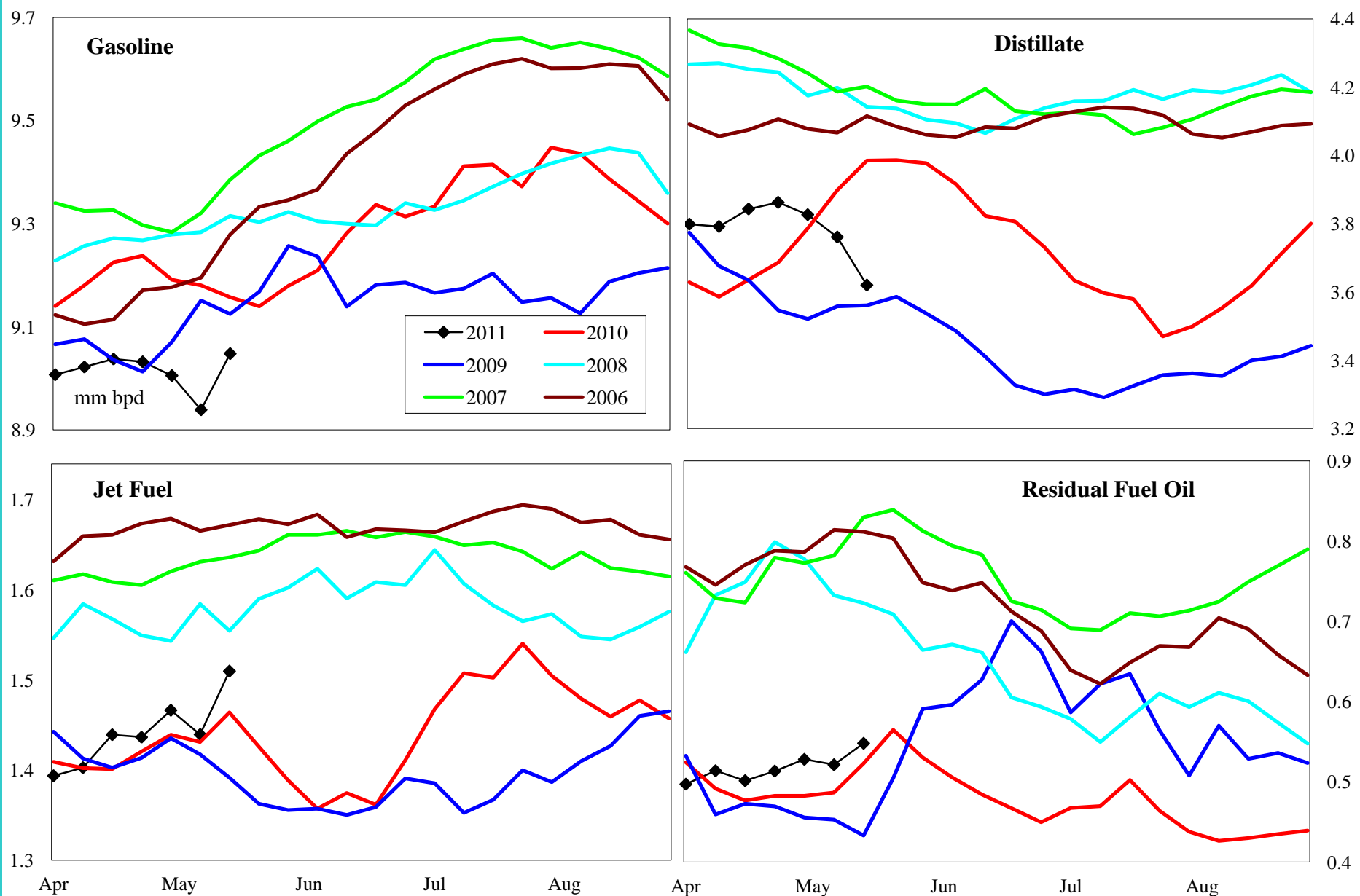
May 18, 2011

Lehi German Tel: 816.505.0980

www.fundamentalpetroleumtrends.com

Fundamental Trends	Wholesale Demand	Stocks Days Fwd Coverage	Refinery Utilization		Product Yield %		Imports
Supply/Demand Trends	13-May-11	EIA-DOE CHANGE FROM PRIOR WEEK					
	000 bpd stocks 000 bls	U. S. Total	PADD				
			1	2	3	4	5
Crude Oil	Stocks	-15	895	-2,376	-210	-219	1,895
	Imports	-394	107	34	-490	-64	18
	Input	239	81	72	156	-1	-69
	% Utilization	1.50					
Gasoline	Stocks	119	-665	449	56	179	101
	Production	255	64	172	114	2	-51
	Imports	-351	-123	-44	-141	0	-42
	Supplied	222					
Distillate	Stocks	-1,157	396	-1,254	118	134	-553
	Production	-169	13	-71	-36	-3	-72
	Imports	-54	-54	0	0	0	0
	Supplied	-149					
Jet Fuel	Stocks	-676	-171	-451	-129	11	64
	Production	22	13	17	-33	-5	30
	Imports	30	70	0	0	0	-40
	Supplied	175					
Residual Fuel Oil	Stocks	-1,270	-598	-58	-975	-11	373
	Production	-16	-7	-14	-31	0	35
	Imports	-155	-80	9	-136	0	52
	Supplied	-48					

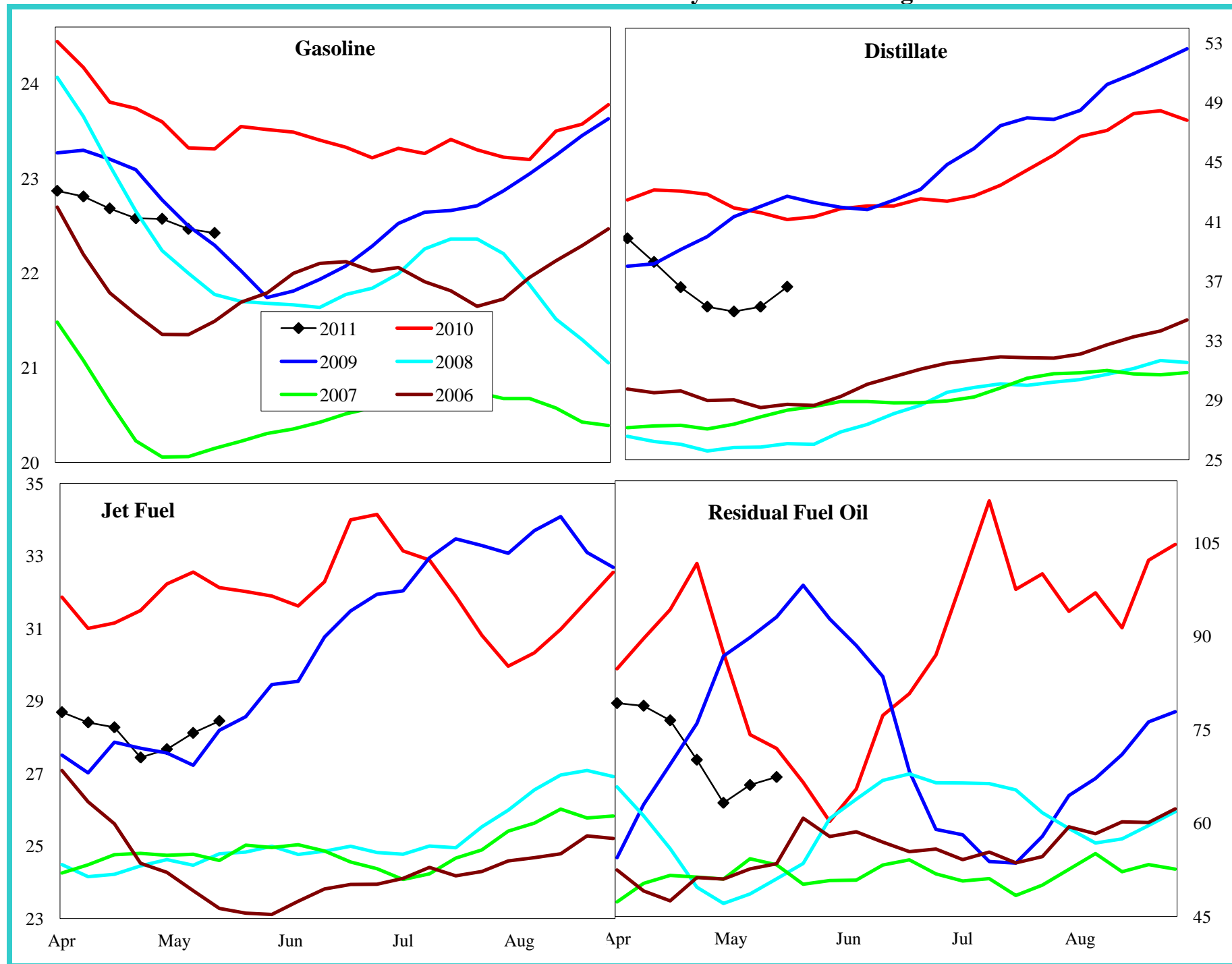
# United States Wholesale Petroleum Demand



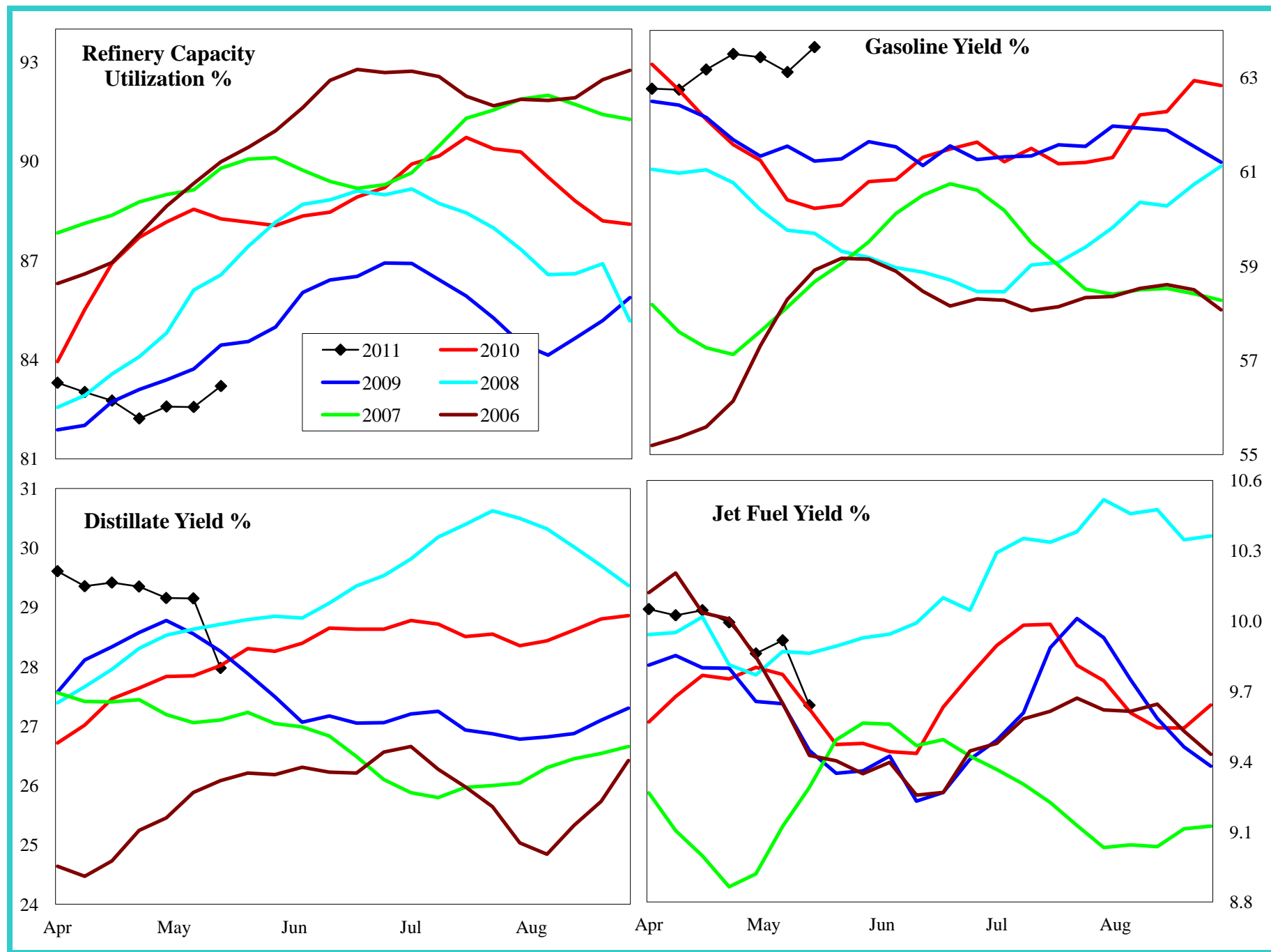
	000 bpd change from prior year				% change from prior year			
	4wk avg	Apr	Jan	Jan	4wk avg	Apr	Mar	Feb
<b>Gasoline</b>	-210	-19	204	415	-2.3	-0.2	2.3	4.8
<b>Distillate</b>	-112	179	39	18	-2.9	4.8	1.0	0.5
<b>Jet Fuel</b>	31	71	-69	11	2.1	5.1	-4.8	0.8
<b>Resid</b>	35	-85	21	106	7.1	-14.7	3.9	20.7



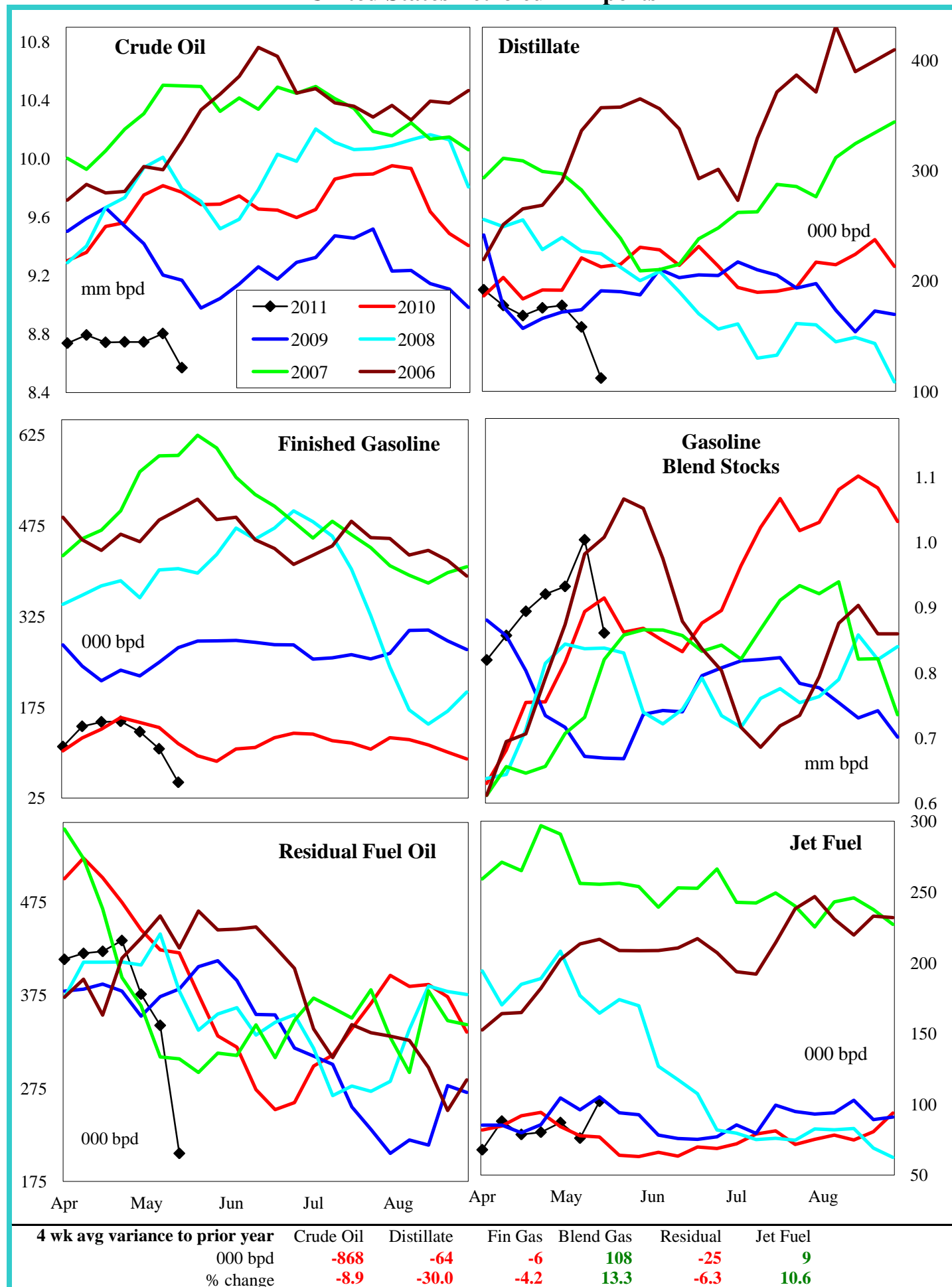
# United States Product Stocks: Days Forward Coverage



## United States Refinery Percent Utilization Rate and Product Yields

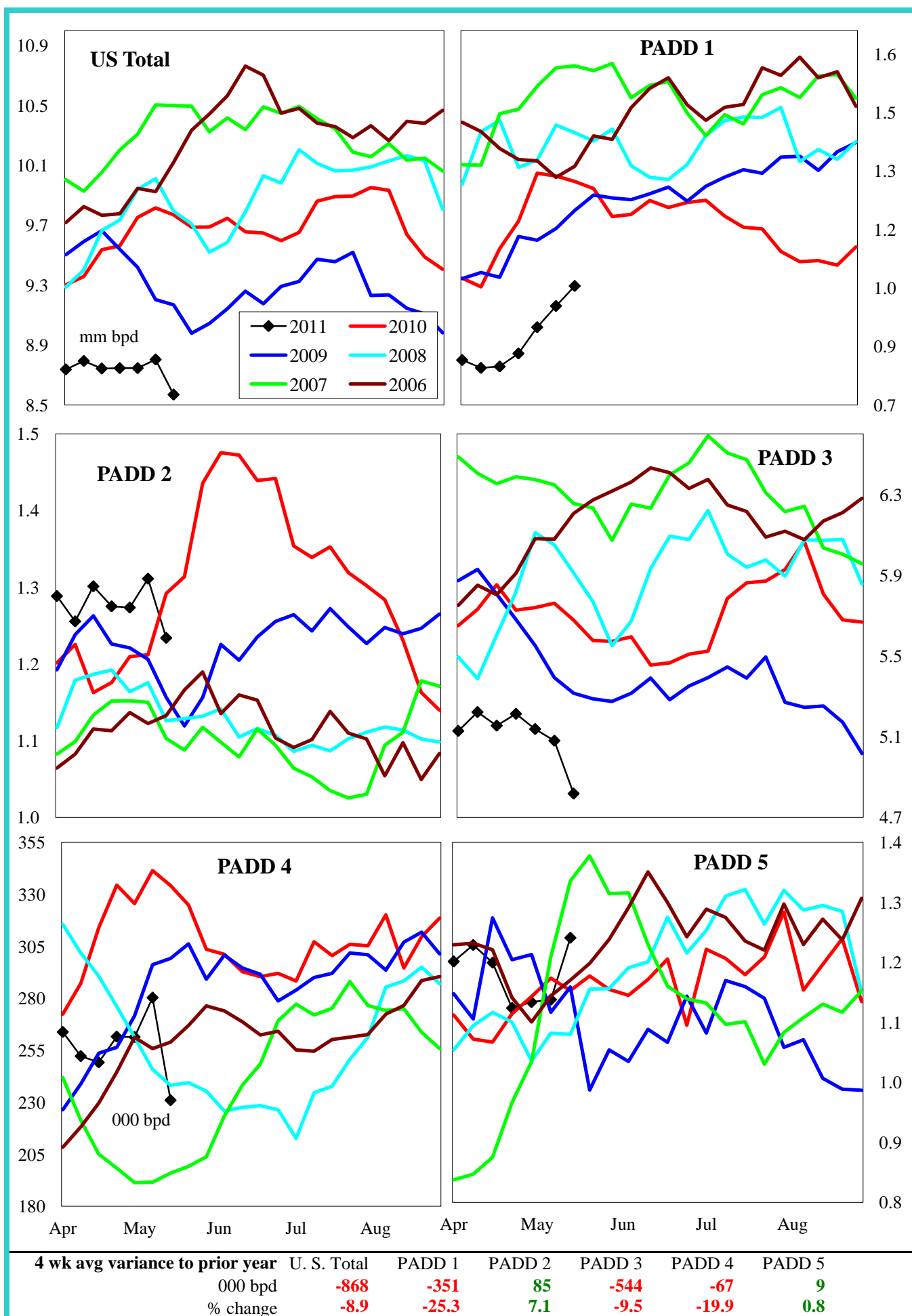


# United States Petroleum Imports

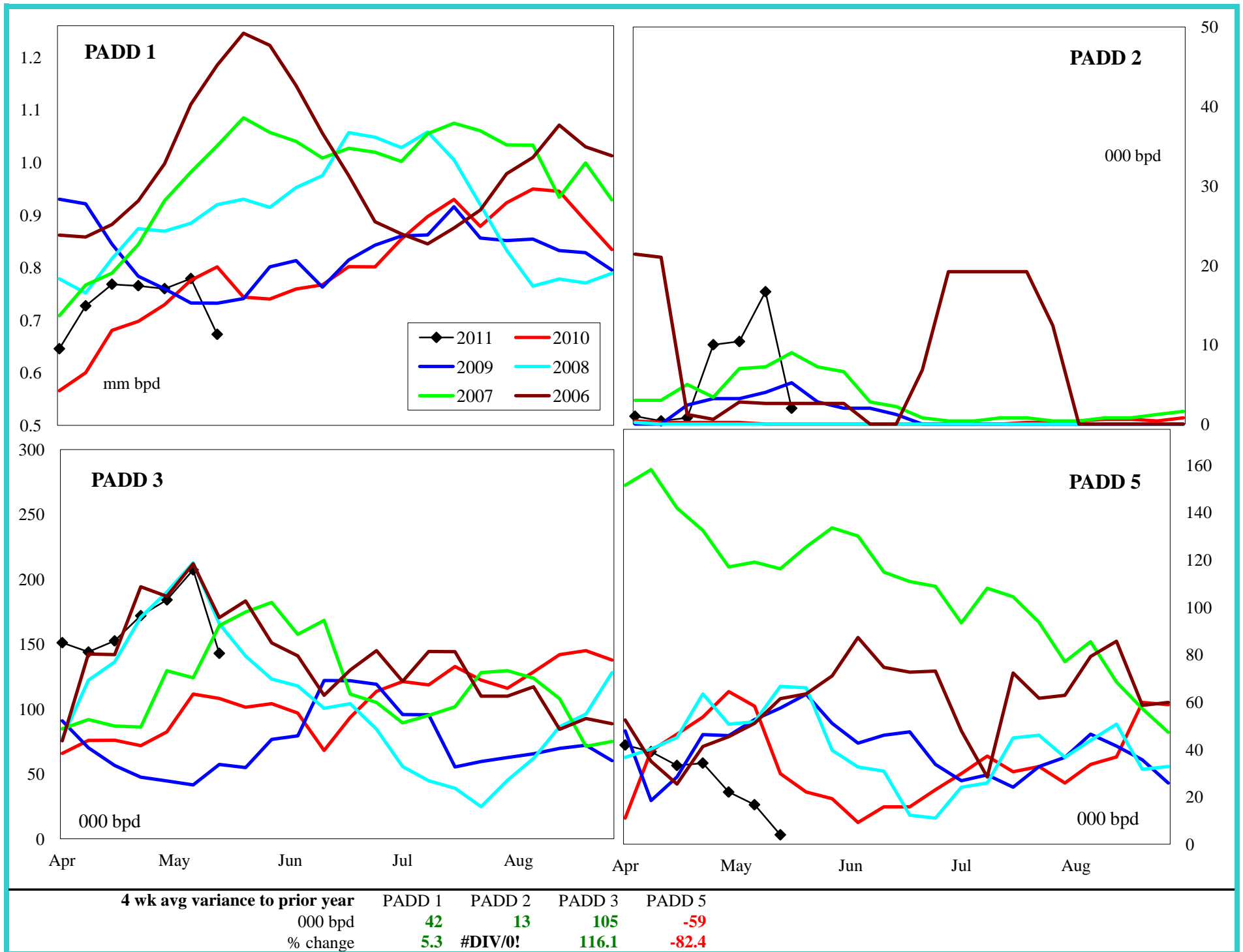




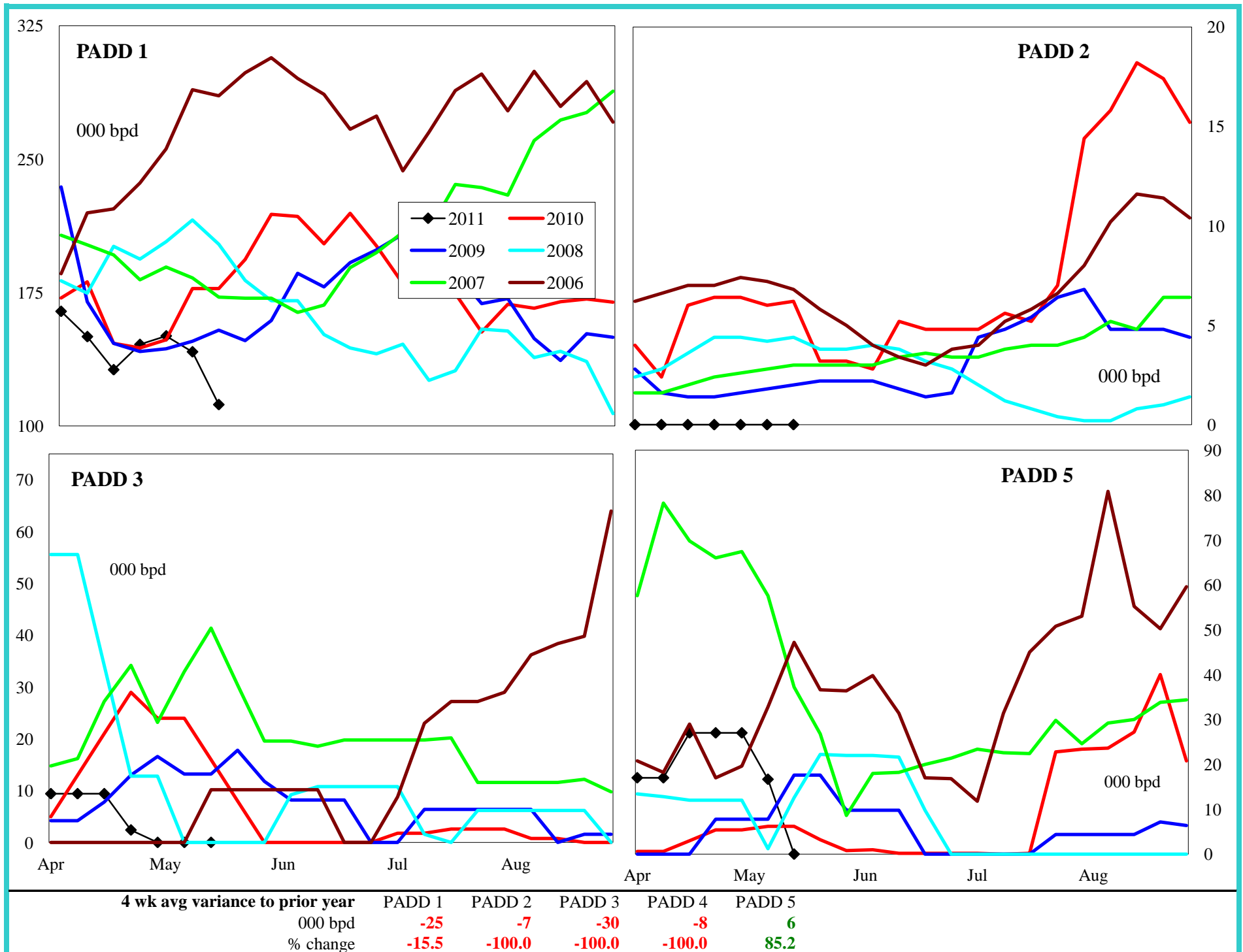
## Crude Oil Imports by PADD



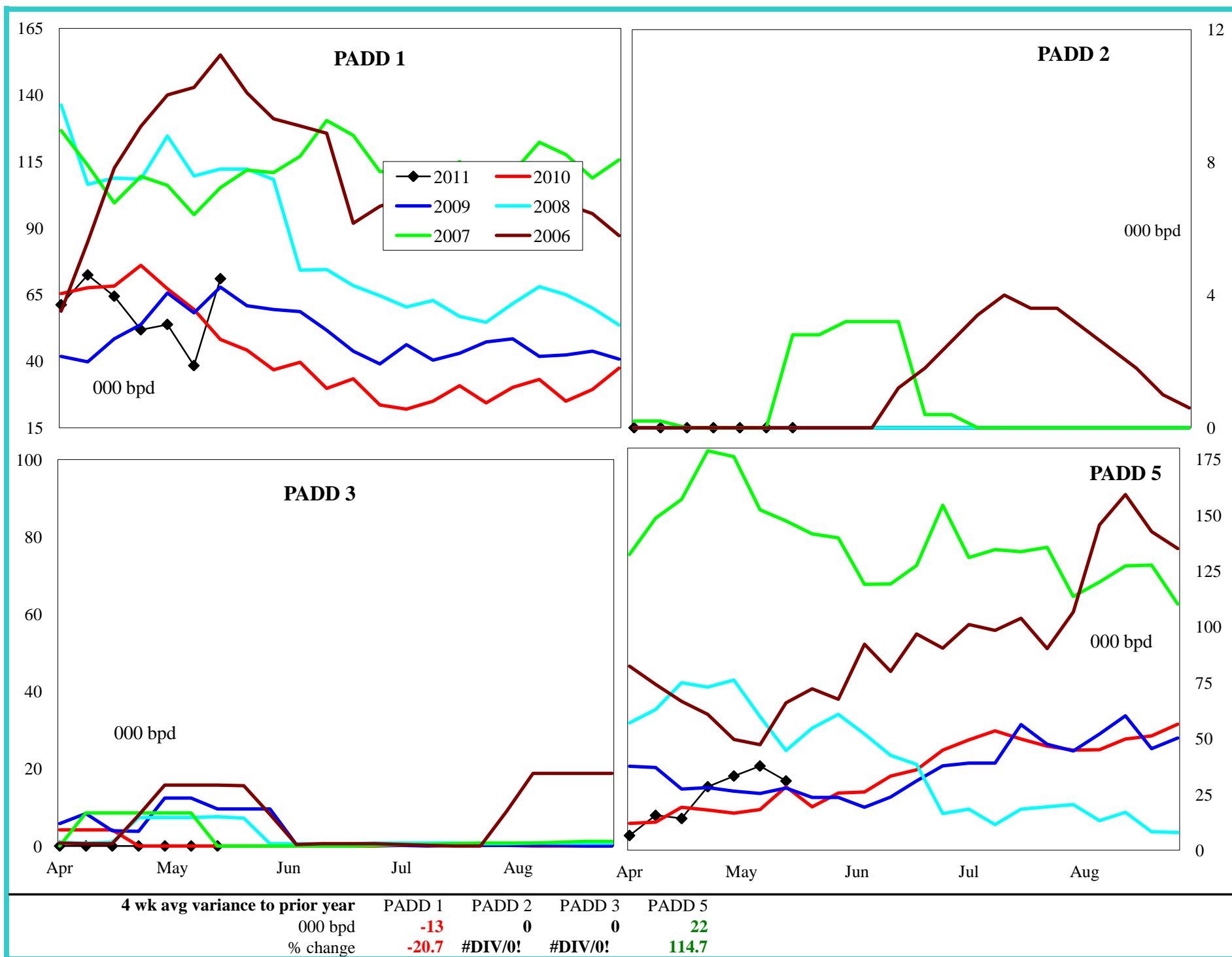
# Gasoline Imports by PADD (Finished + Blend Stocks)



# Distillate Imports by PADD

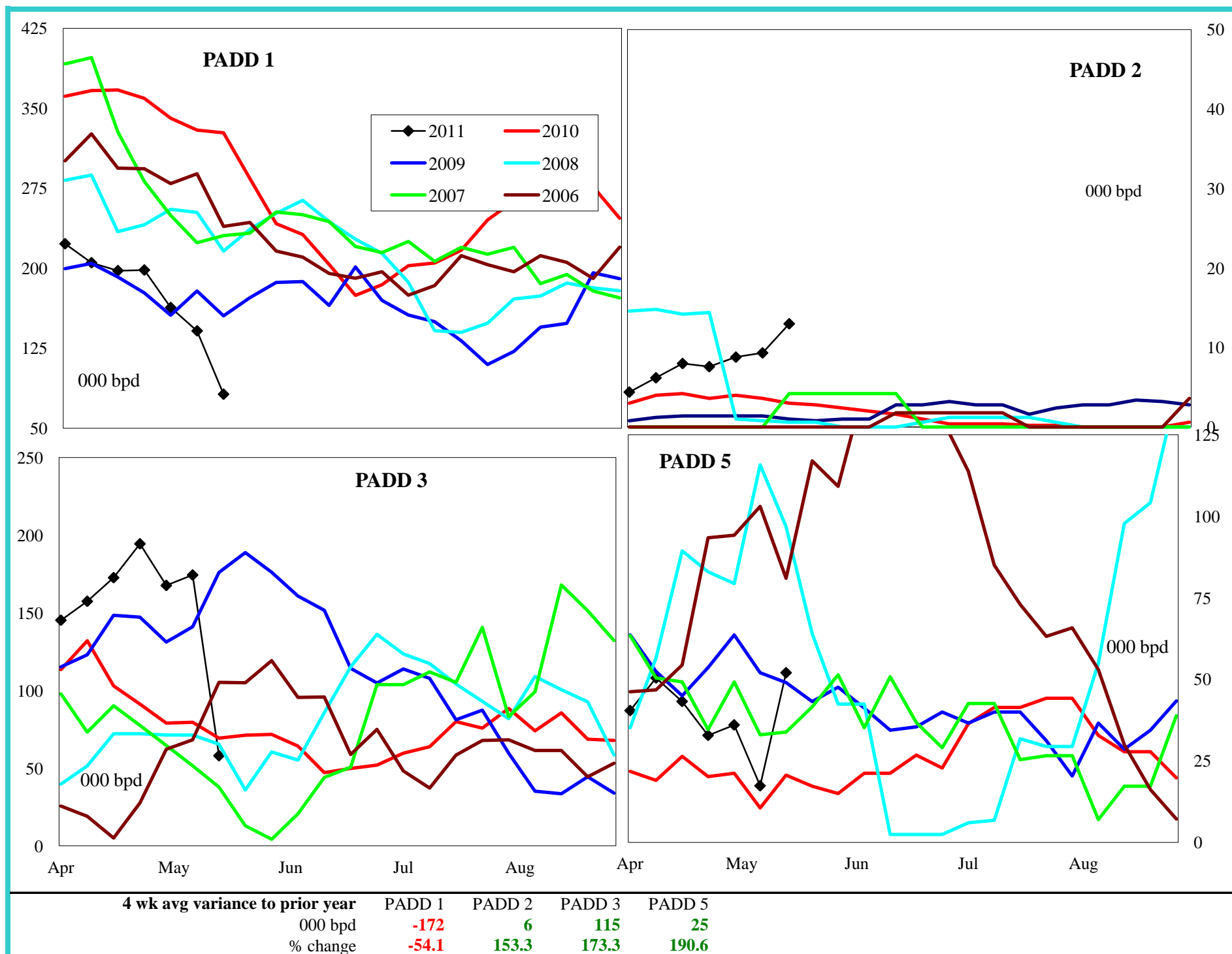


# Jet Fuel Imports by PADD

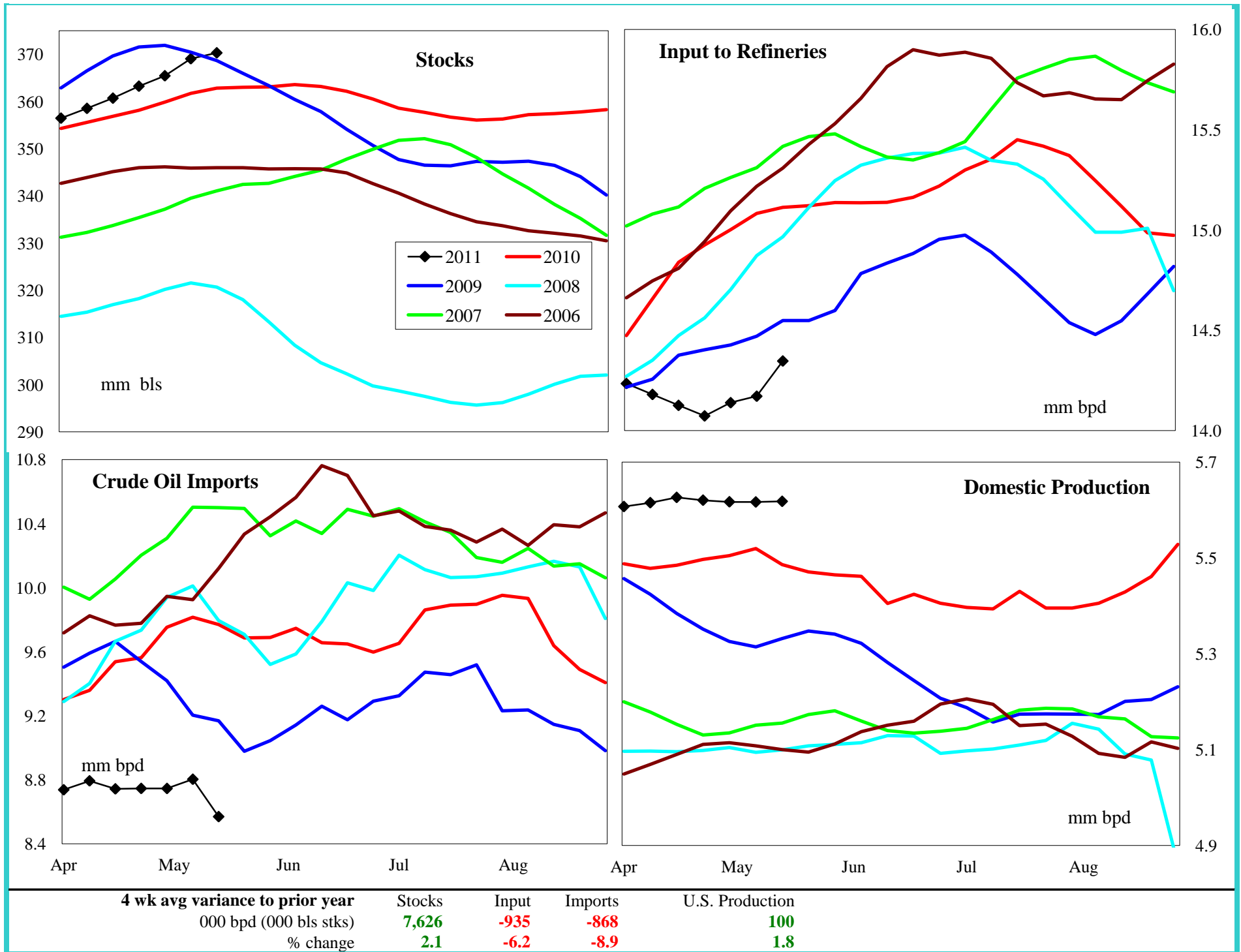




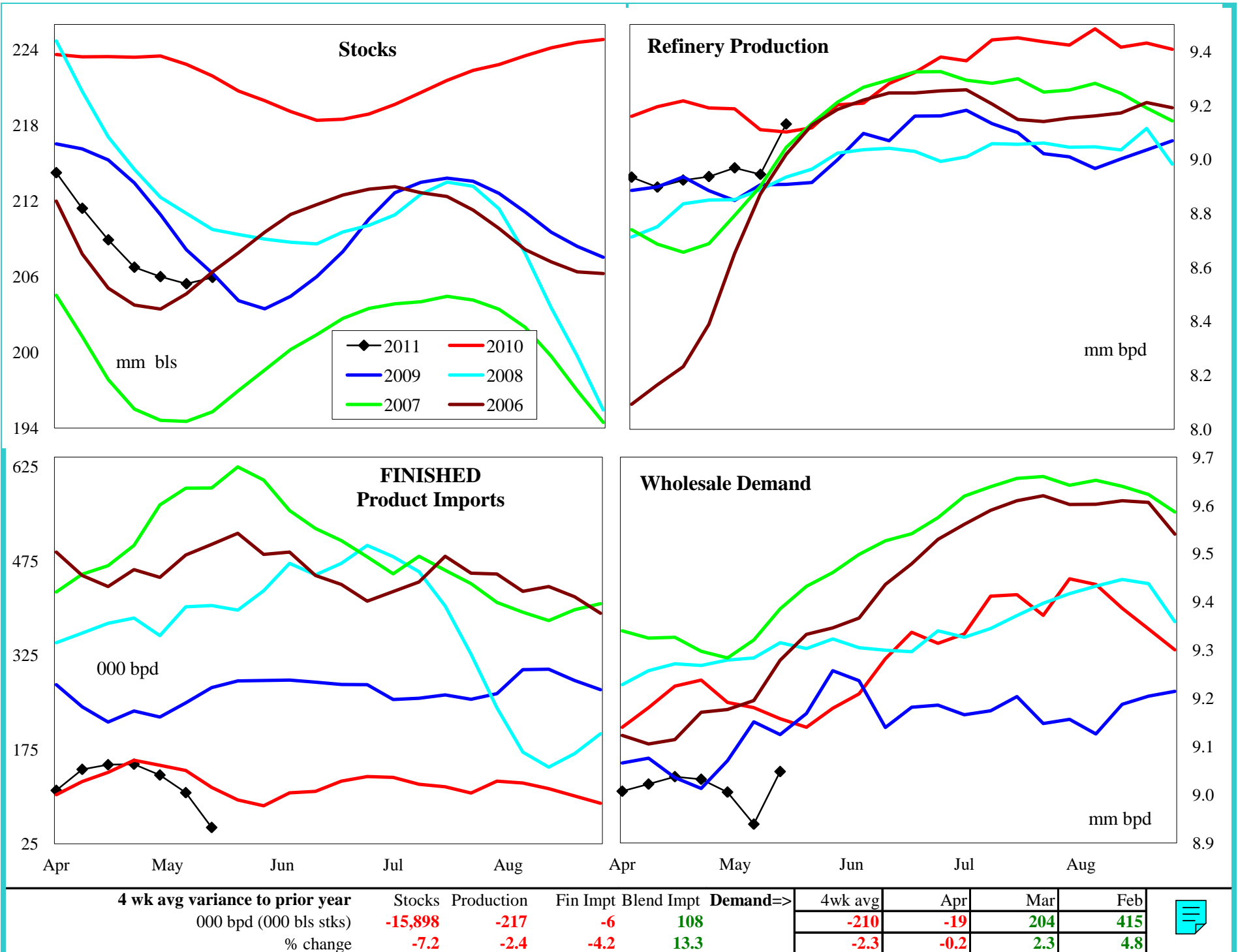
## Residual Fuel Oil Imports by PADD



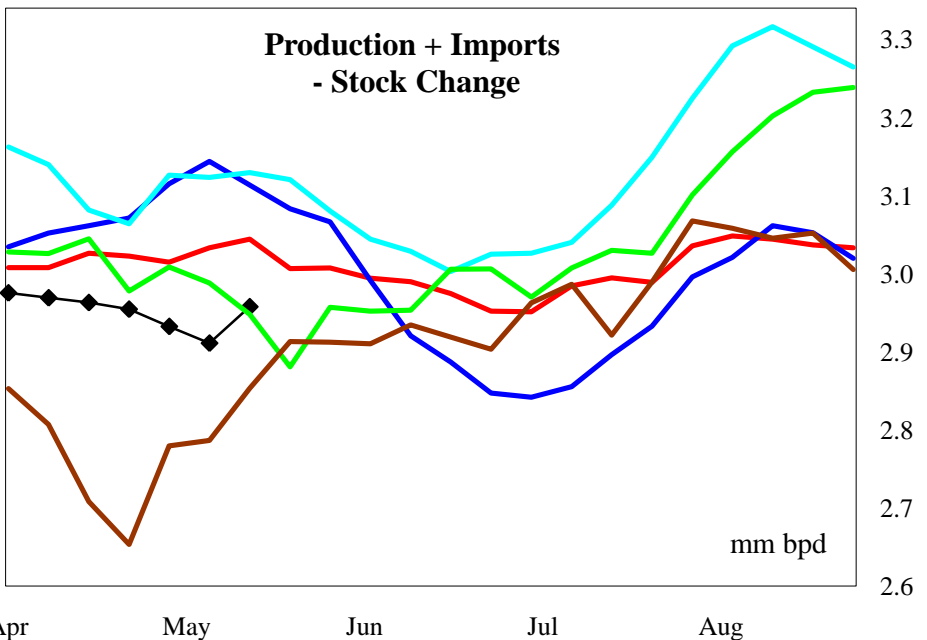
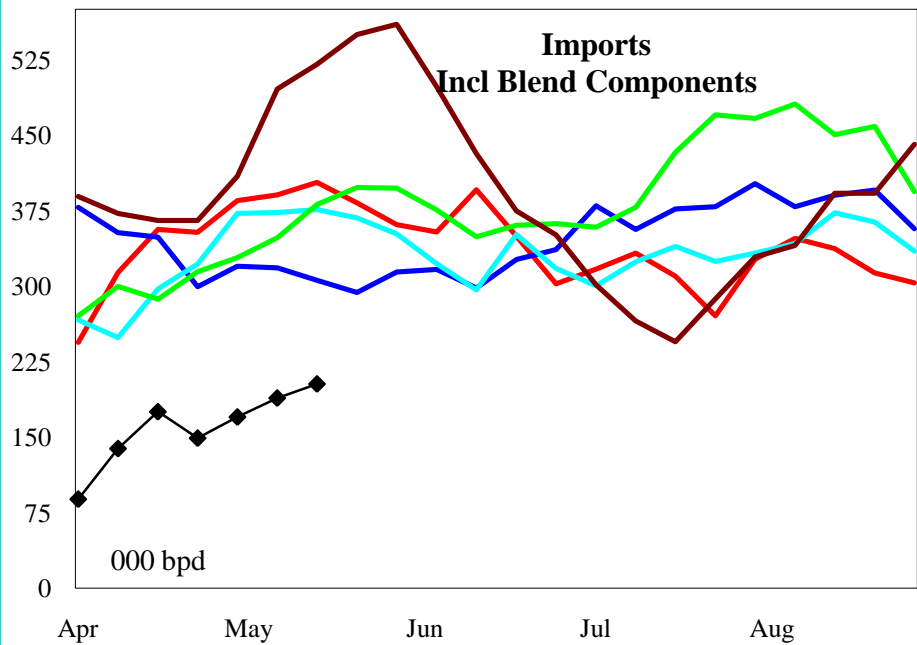
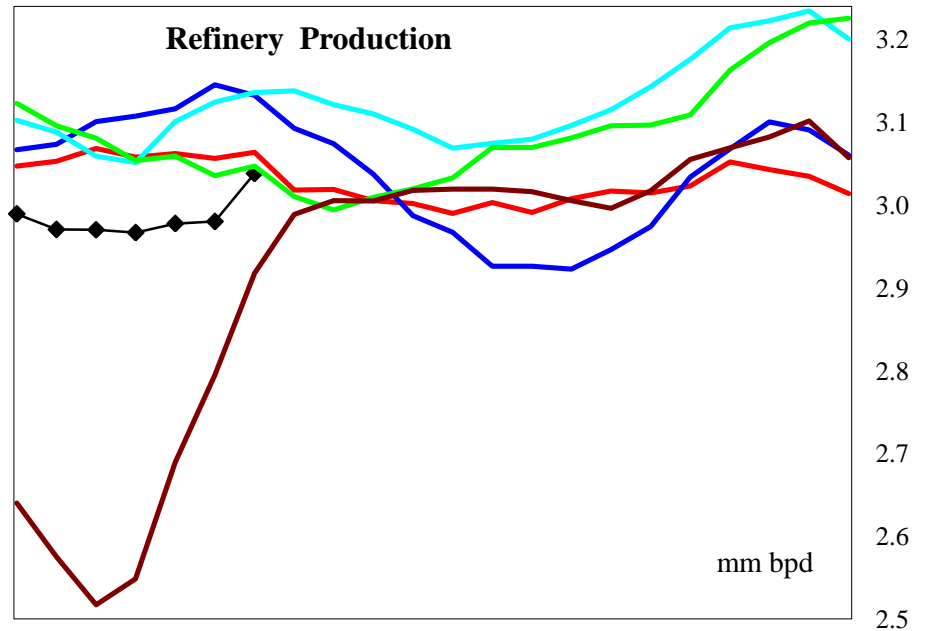
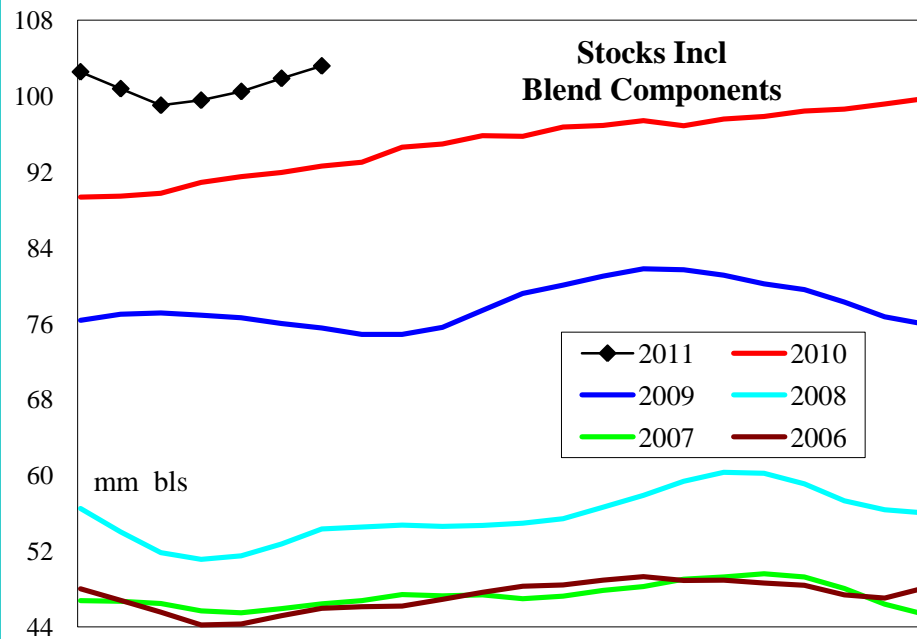
# United States Crude Oil Supply and Demand Balance



# United States Gasoline Supply and Demand Balance



# United States Reformulated Gasoline Supply



**4 wk avg variance to prior year**

000 bpd (000 bbls stks)

% change

Stocks

10,561

11.4

Production

-88

-2.9

Imports

-205

-53.6

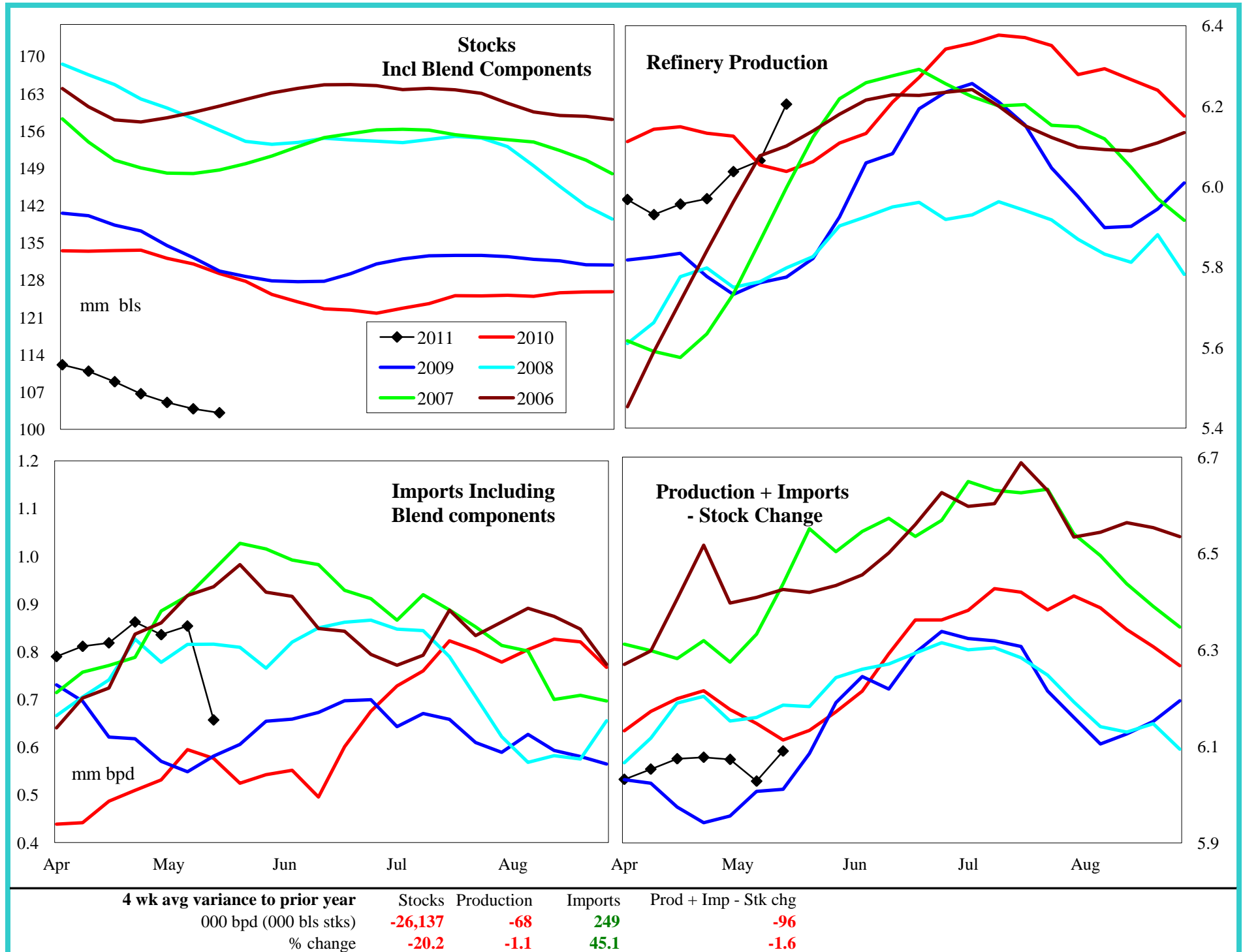
Prod + Imp - Stk chg

-90

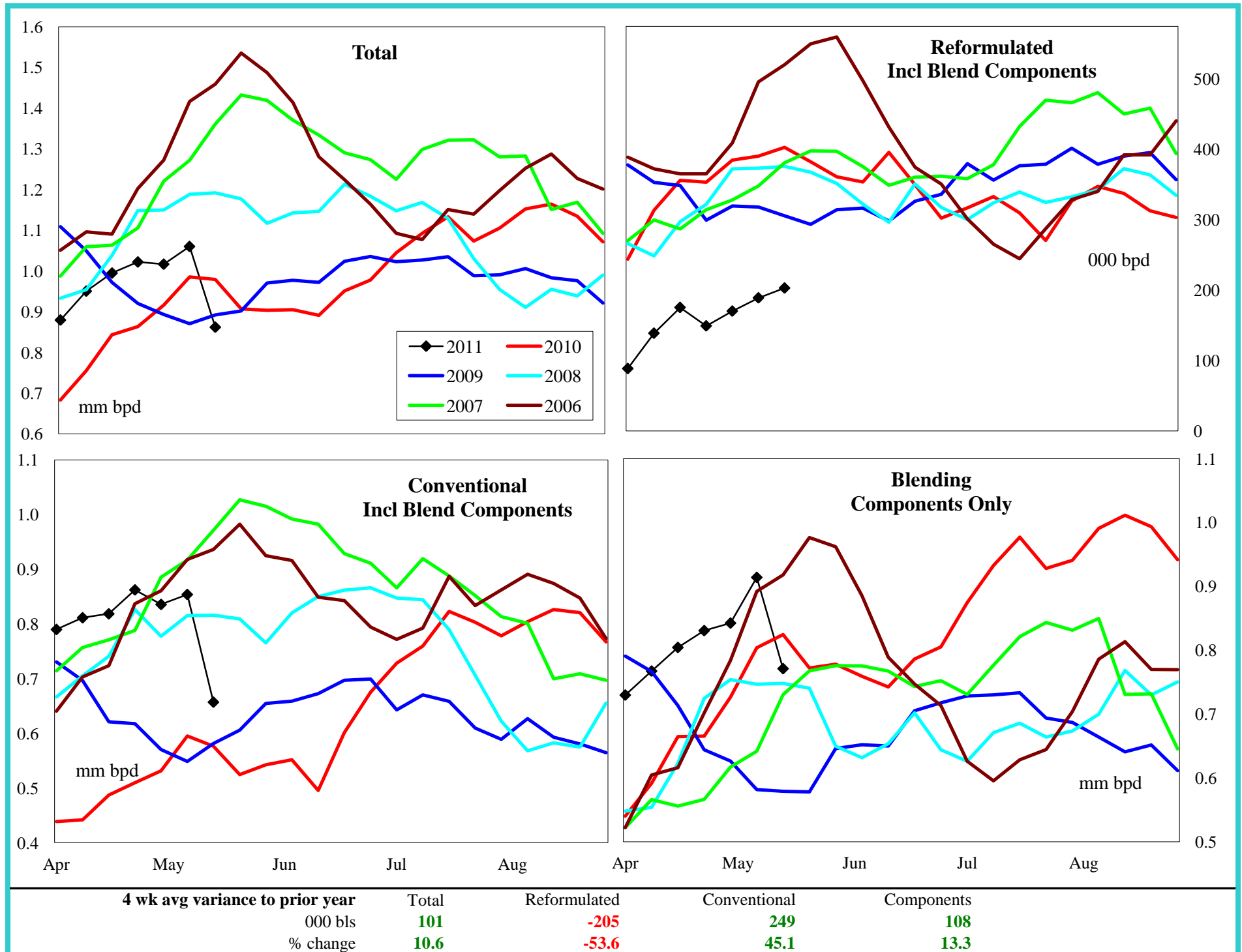
-3.0



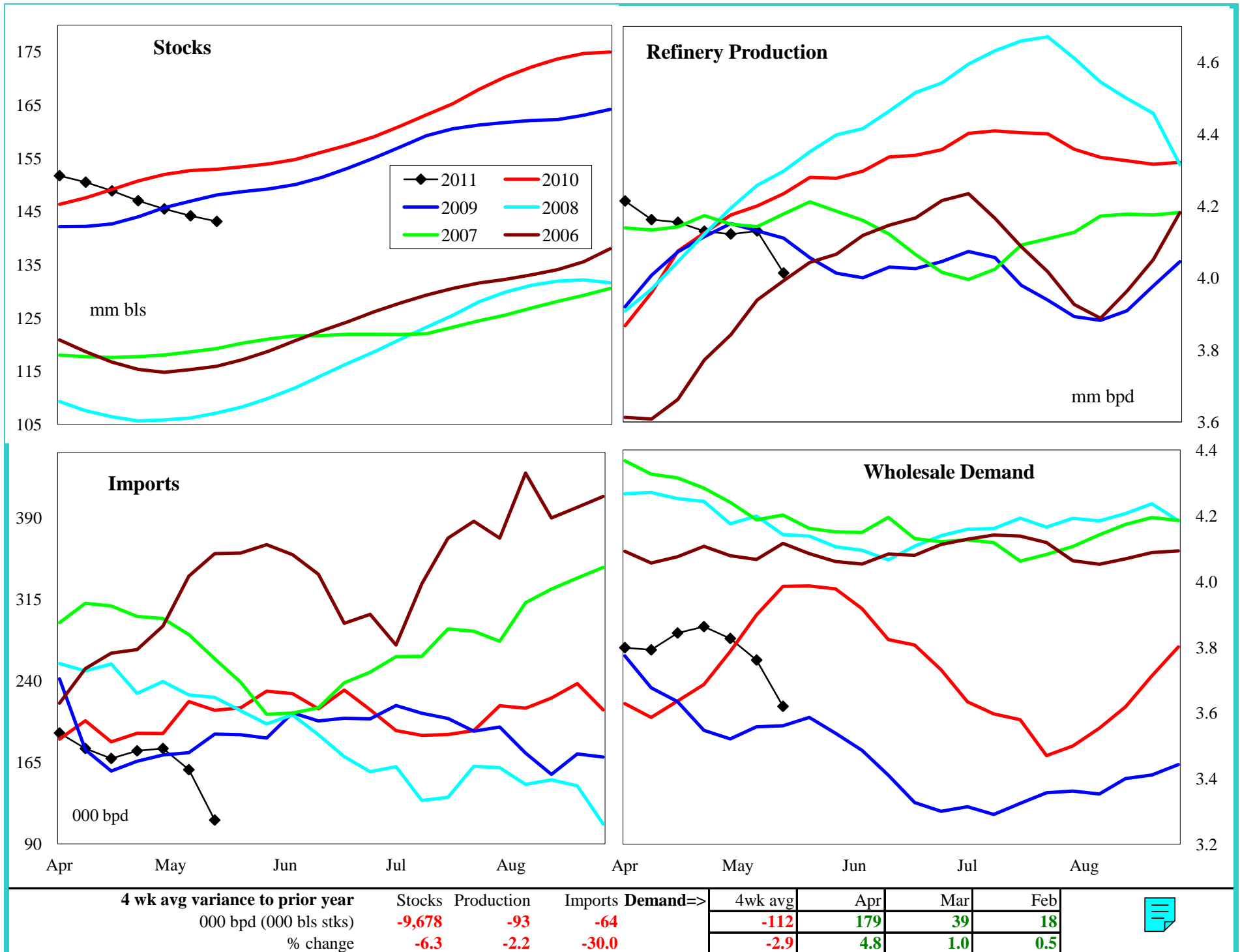
# United States Conventional Gasoline Supply



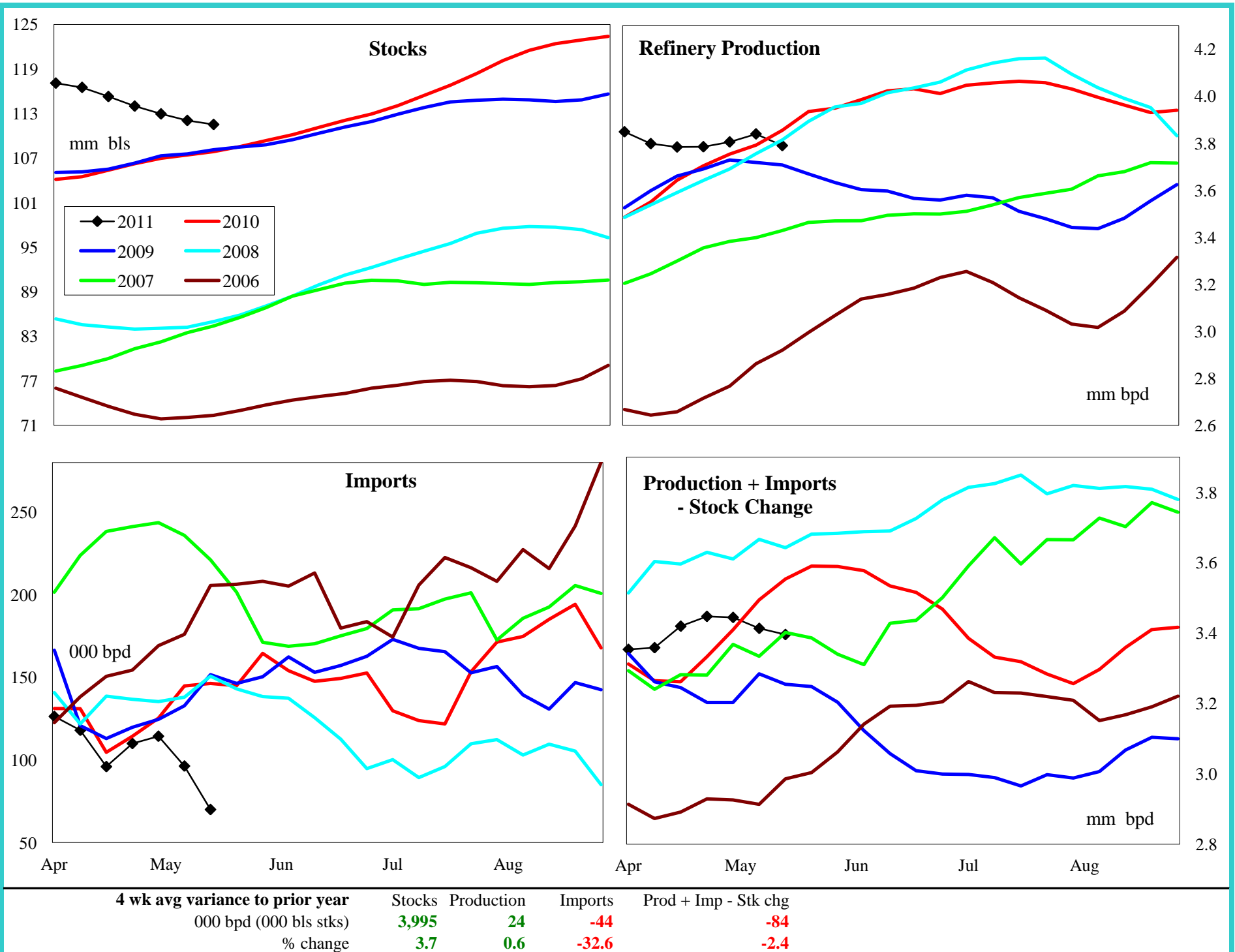
# United States Gasoline Imports by Type



# United States Distillate Supply and Demand Balance

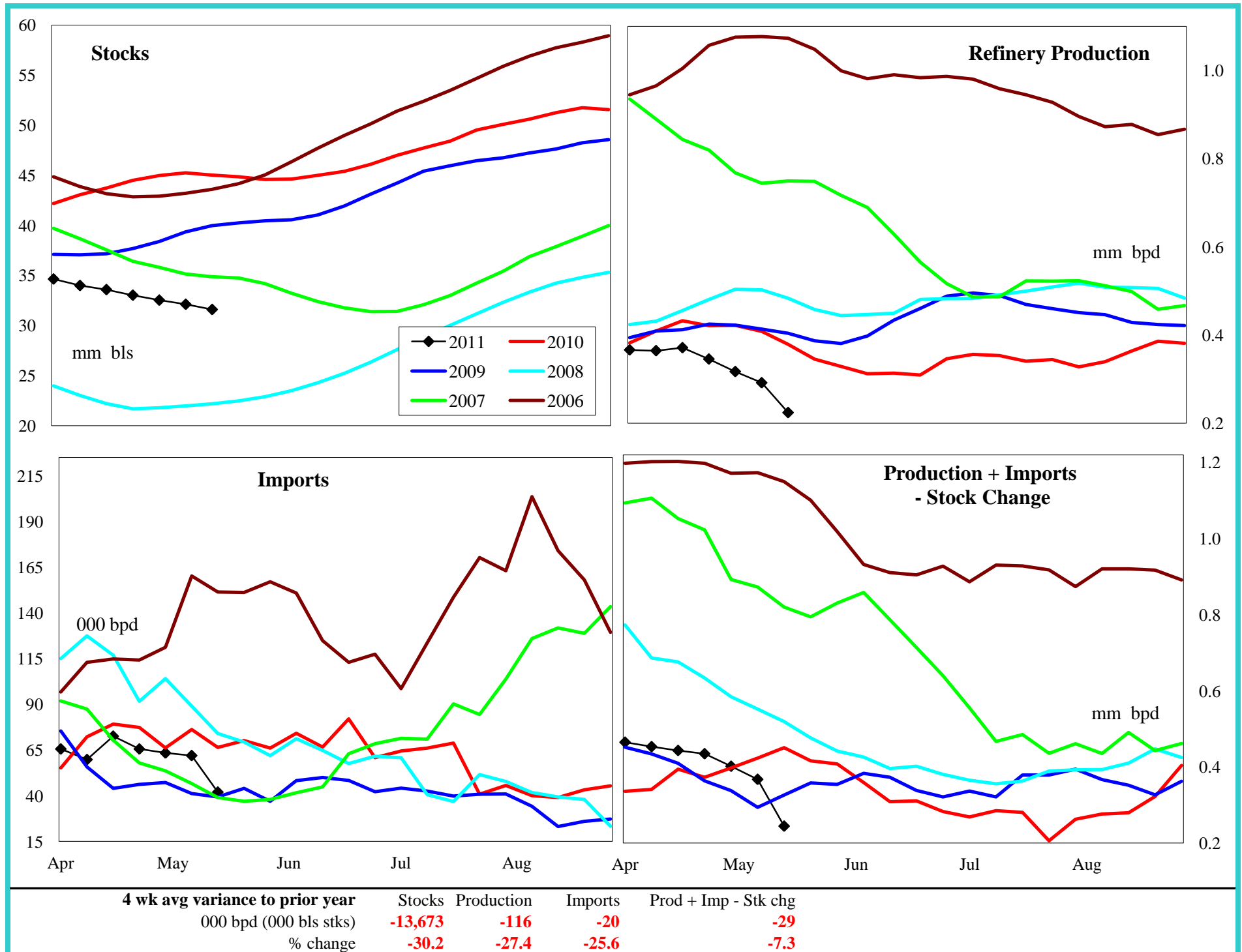


# United States Low Sulfur Distillate Supply

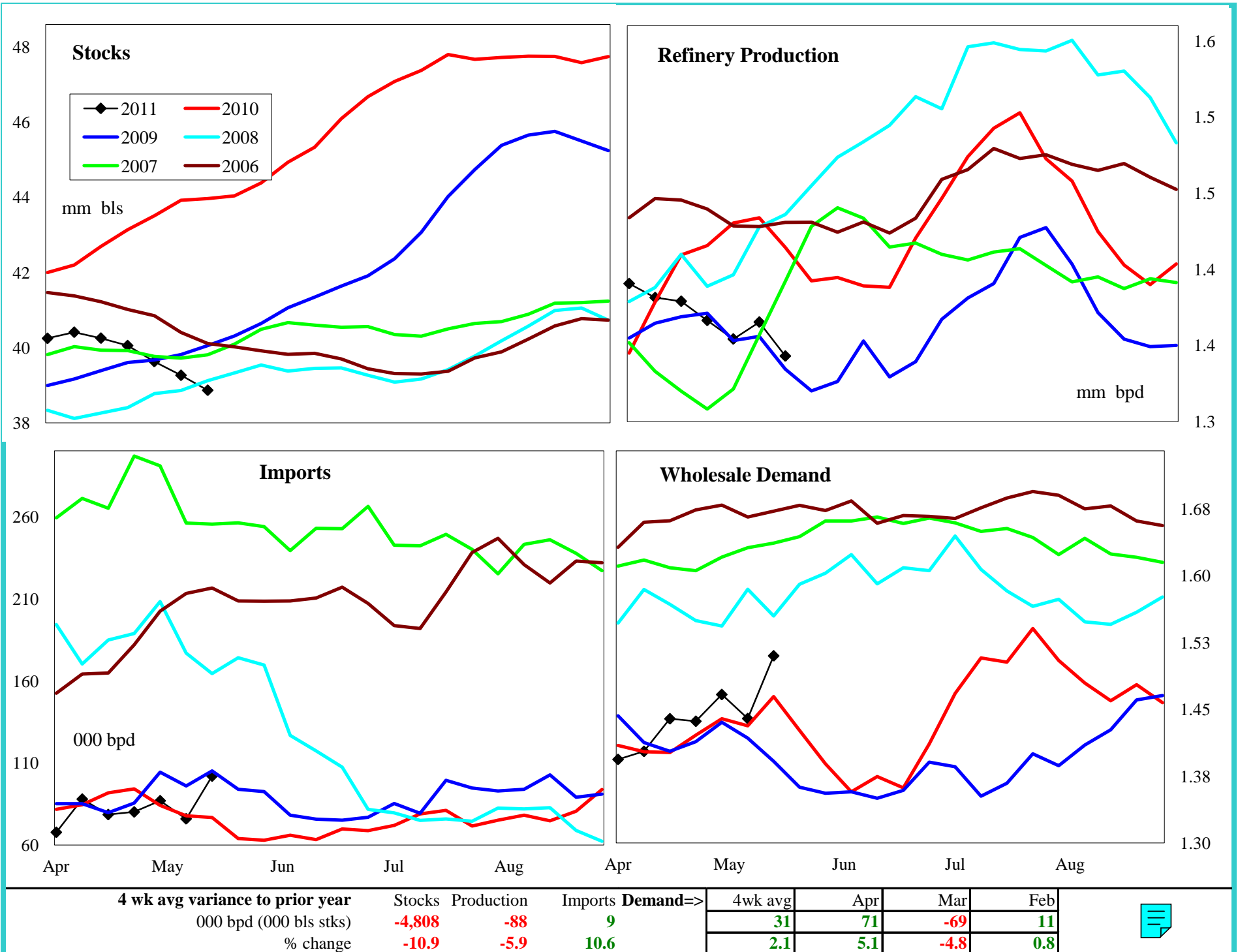




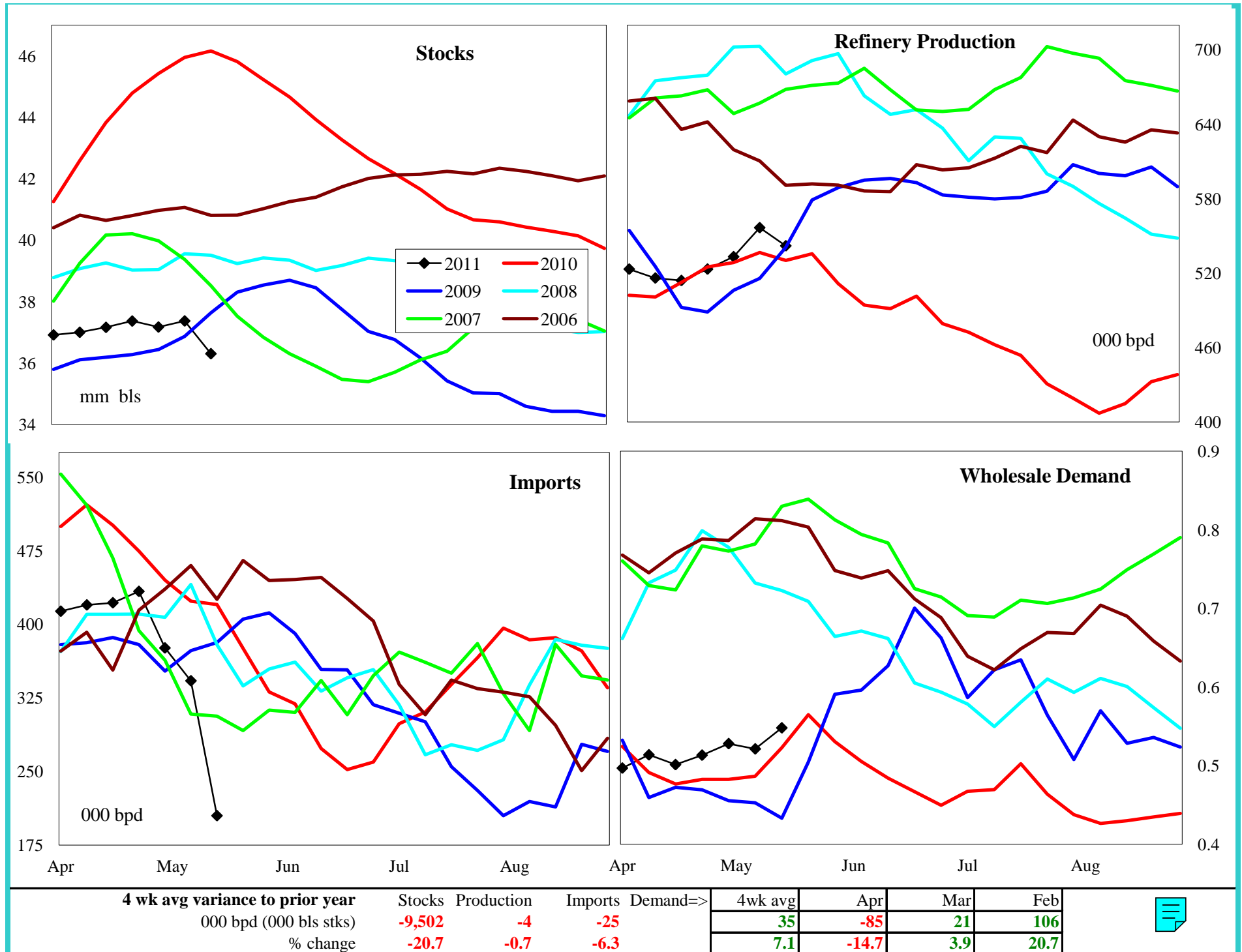
# United States High Sulfur Distillate Supply



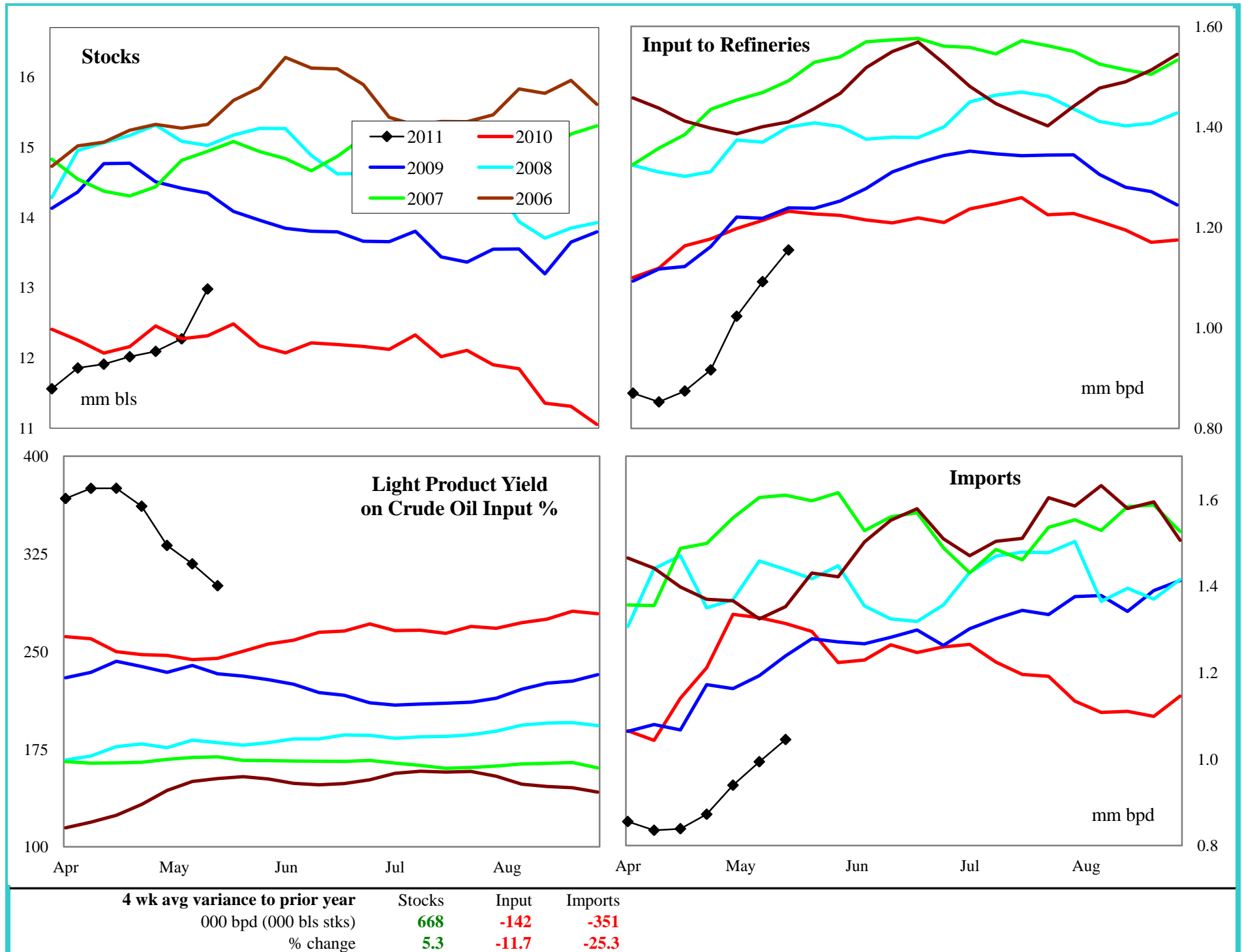
# United States Jet Fuel Supply and Demand Balance



# United States Residual Fuel Oil Supply and Demand Balance

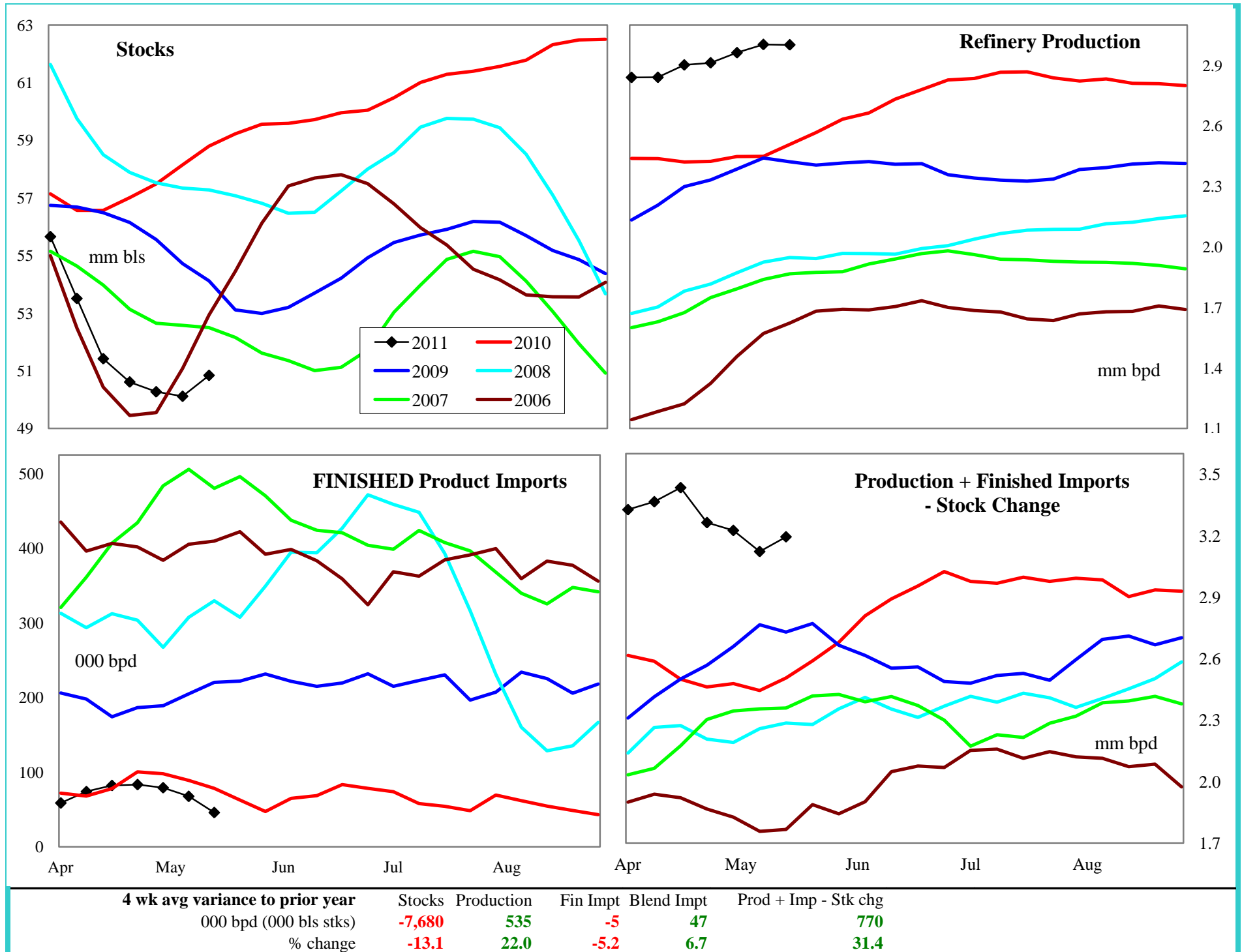


# PADD 1 Crude Oil Supply and Refining

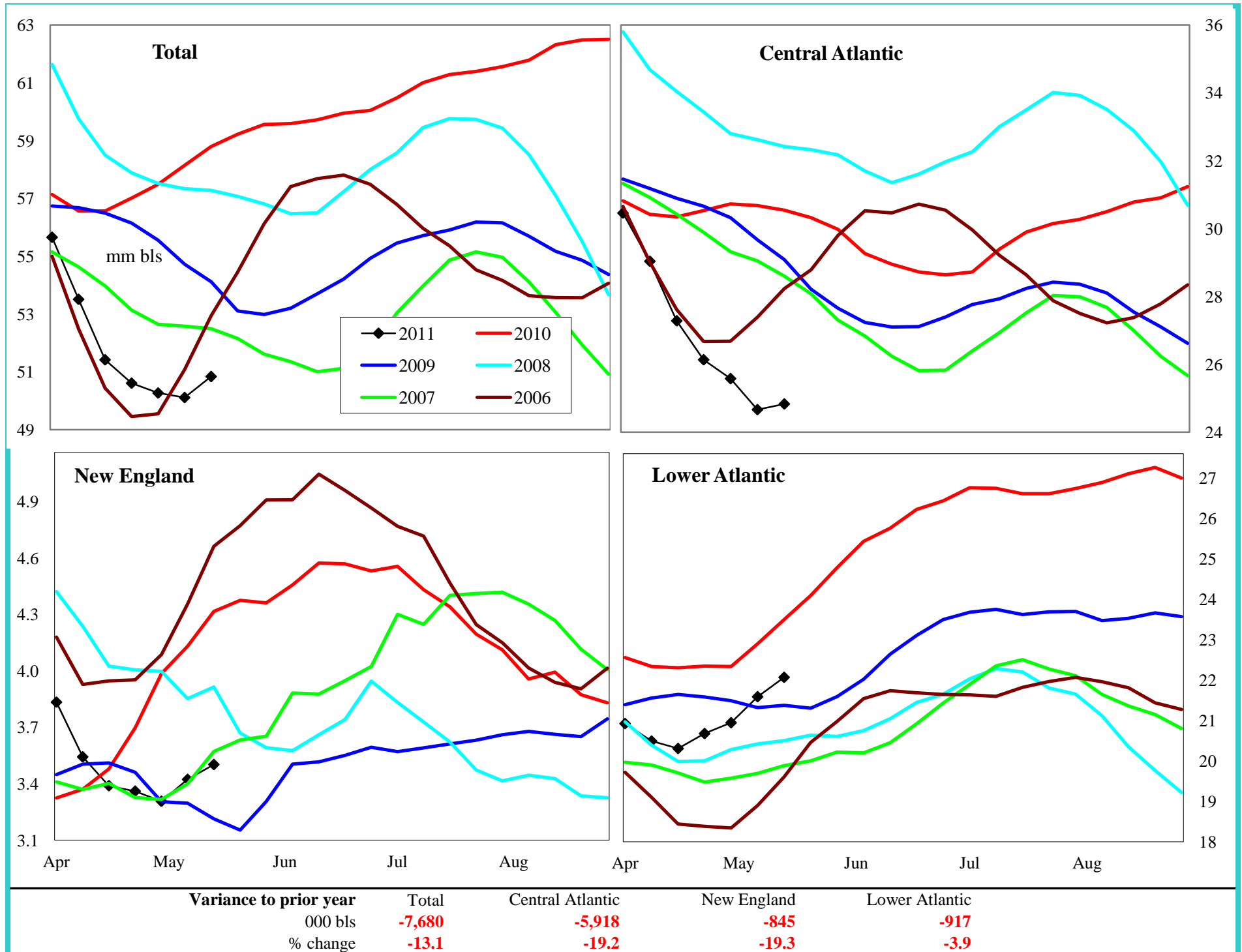




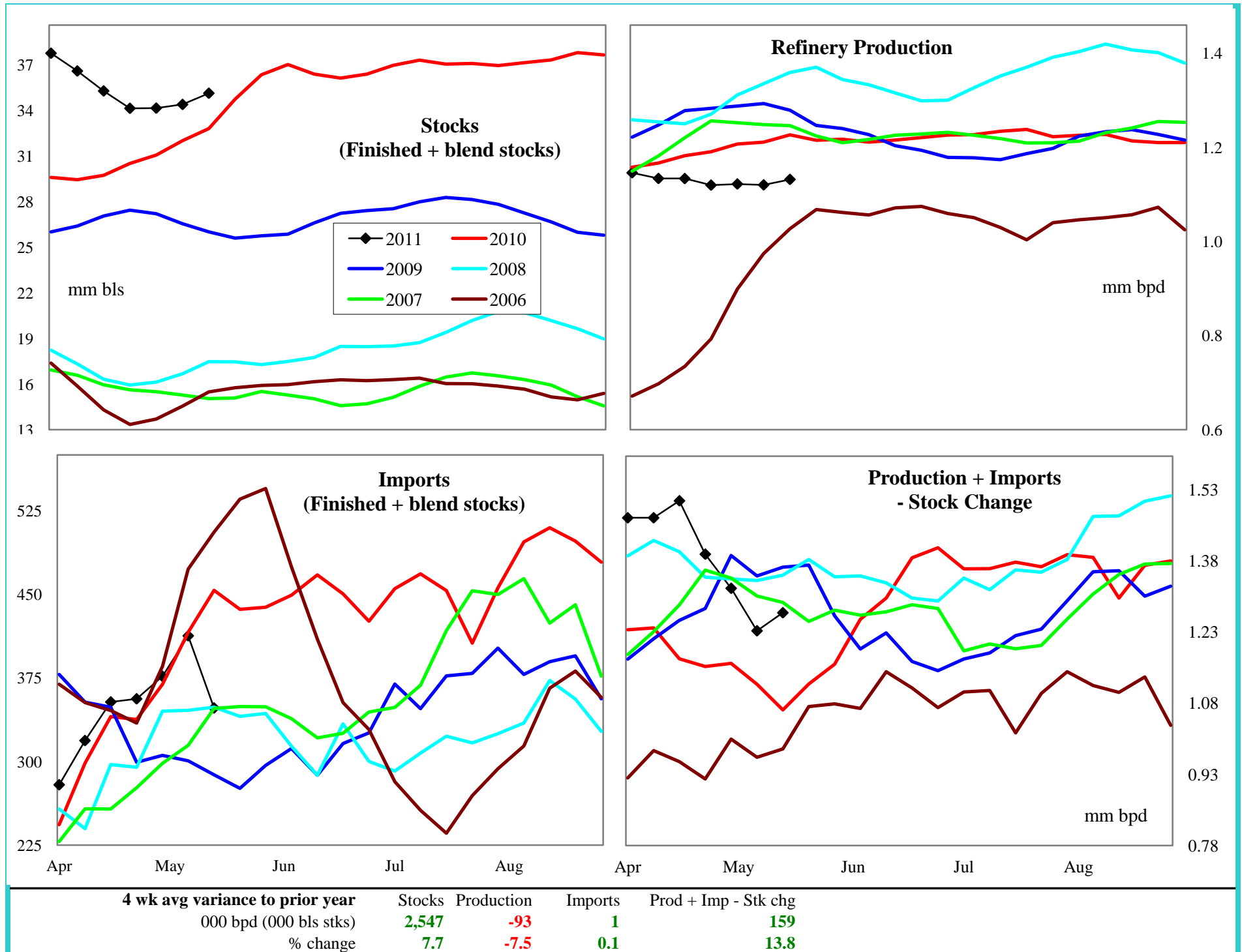
# PADD 1 Gasoline Supply



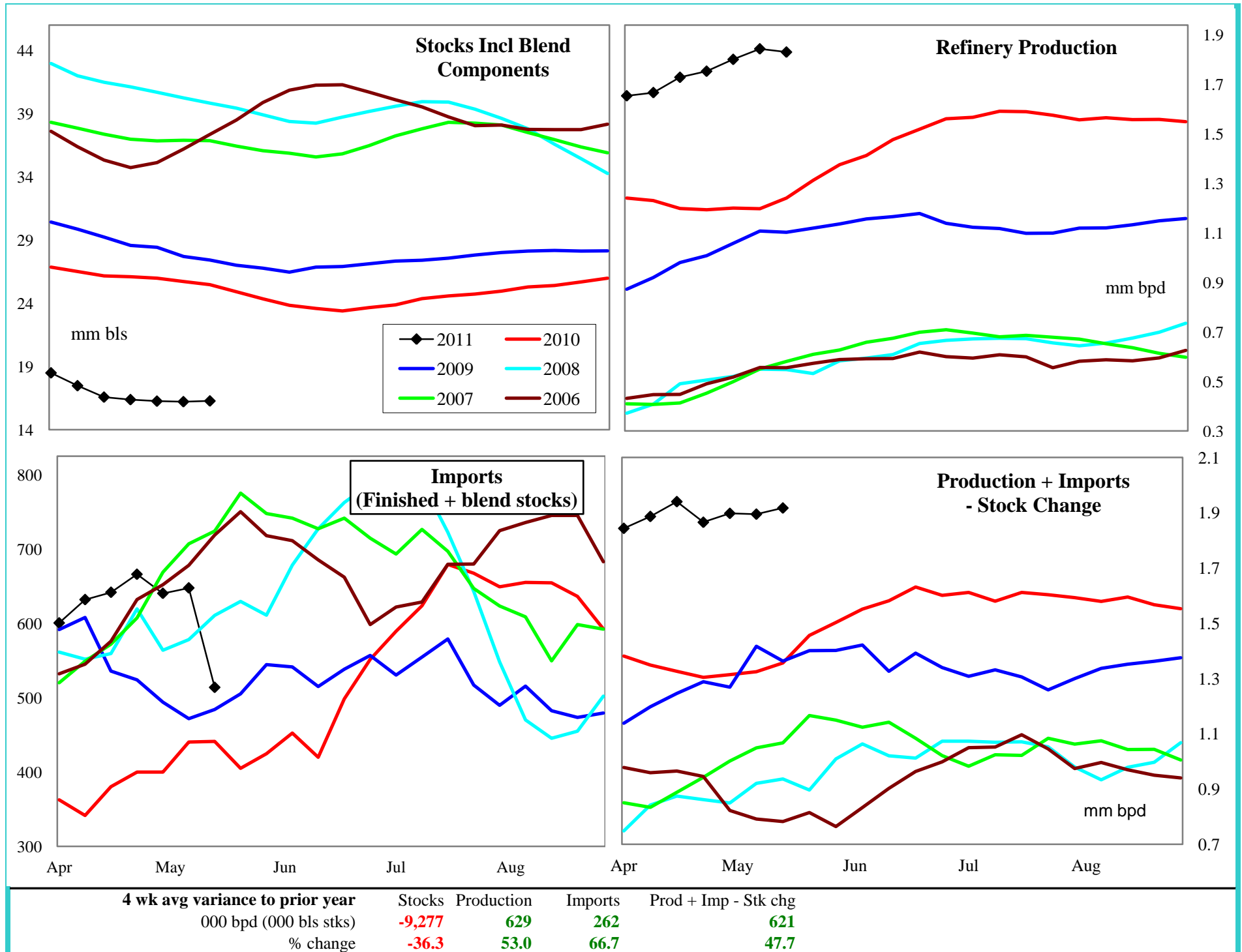
# PADD 1 Gasoline Stocks by Region



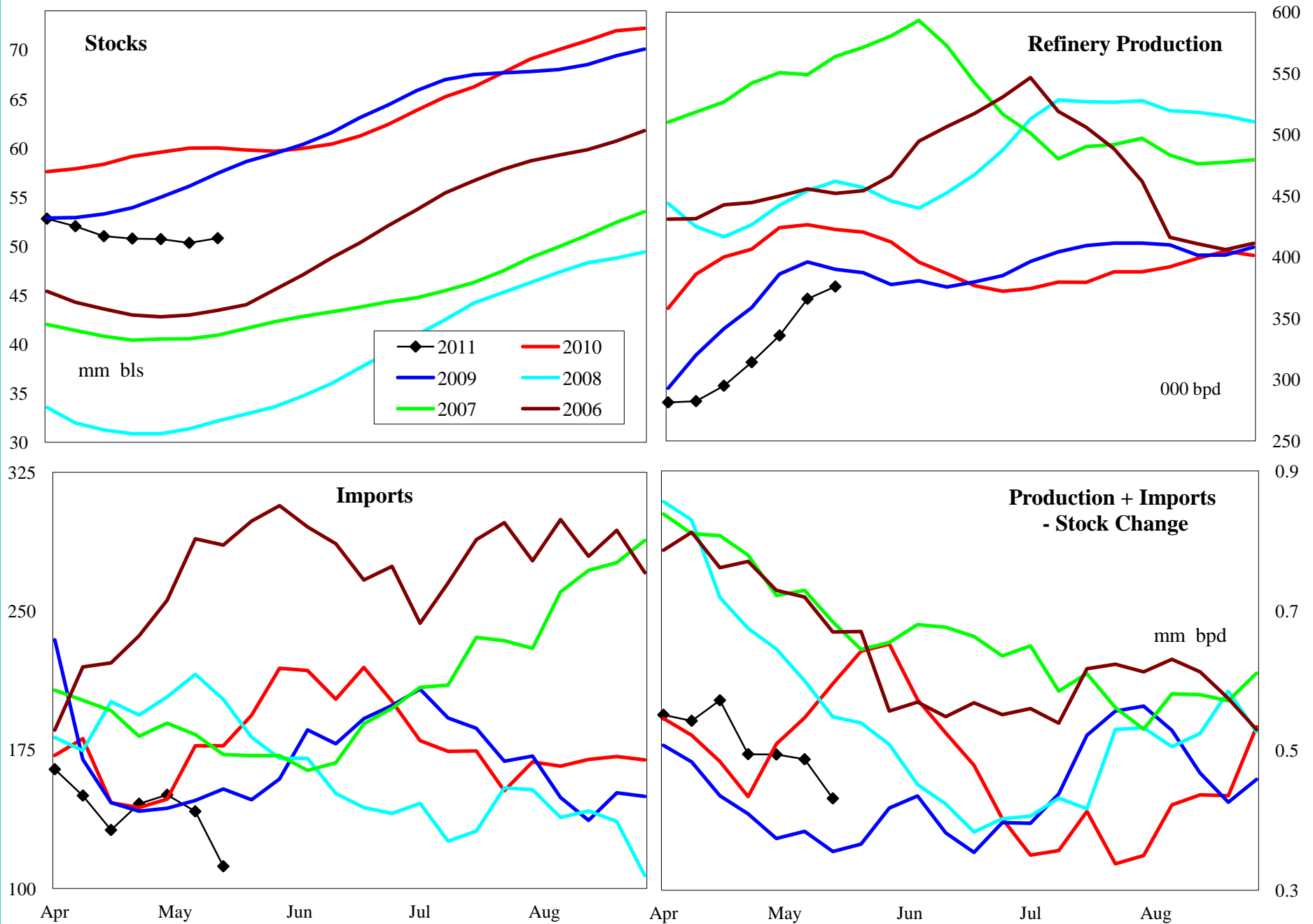
# PADD 1 Reformulated Gasoline Supply



# PADD 1 Conventional Gasoline Supply



# PADD 1 Distillate Supply



4 wk avg variance to prior year

000 bpd (000 bls stks)

% change

Stocks

-8,923

-14.9

Production

-77

-18.0

Imports

-25

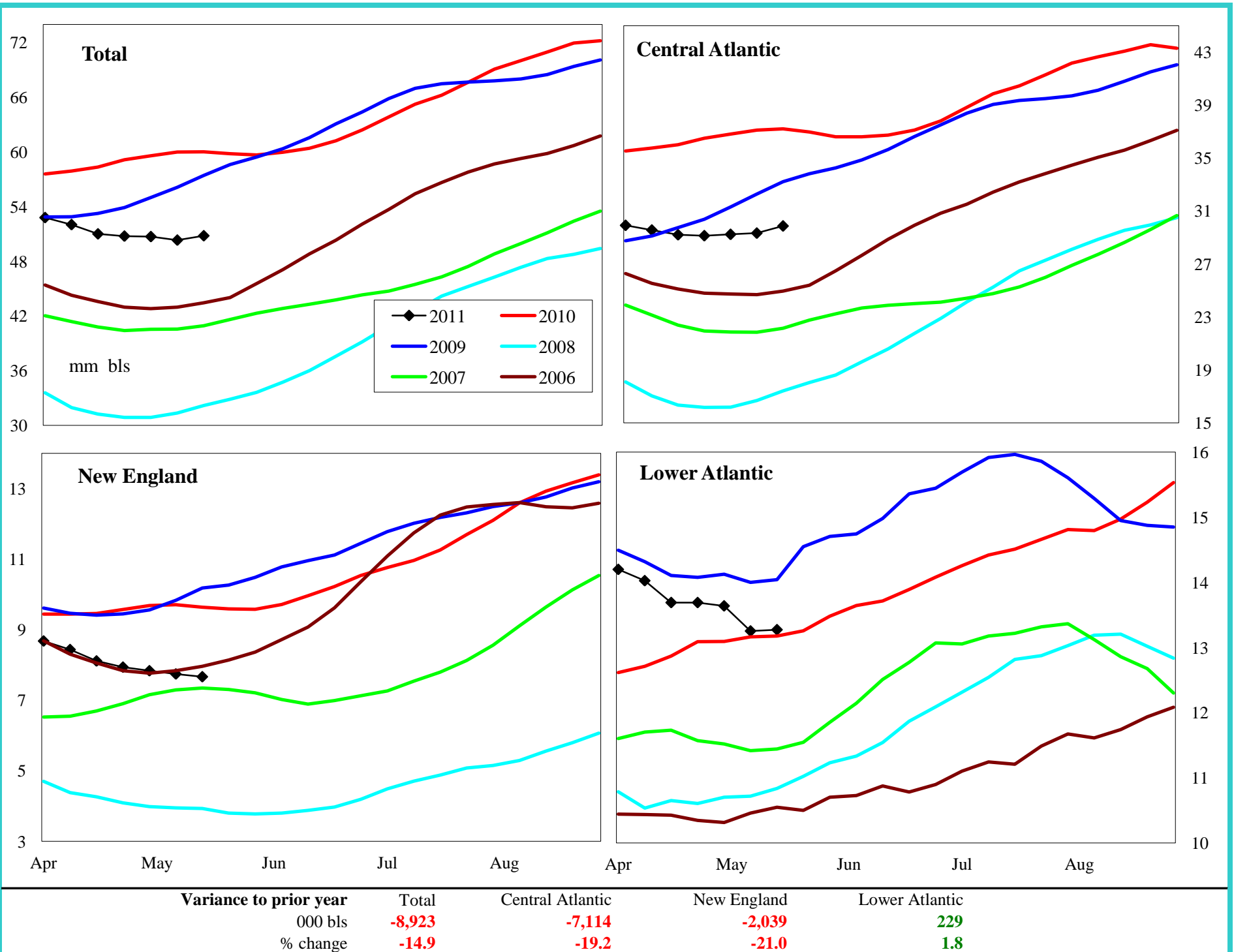
-15.5

Prod + Imp - Stk chg

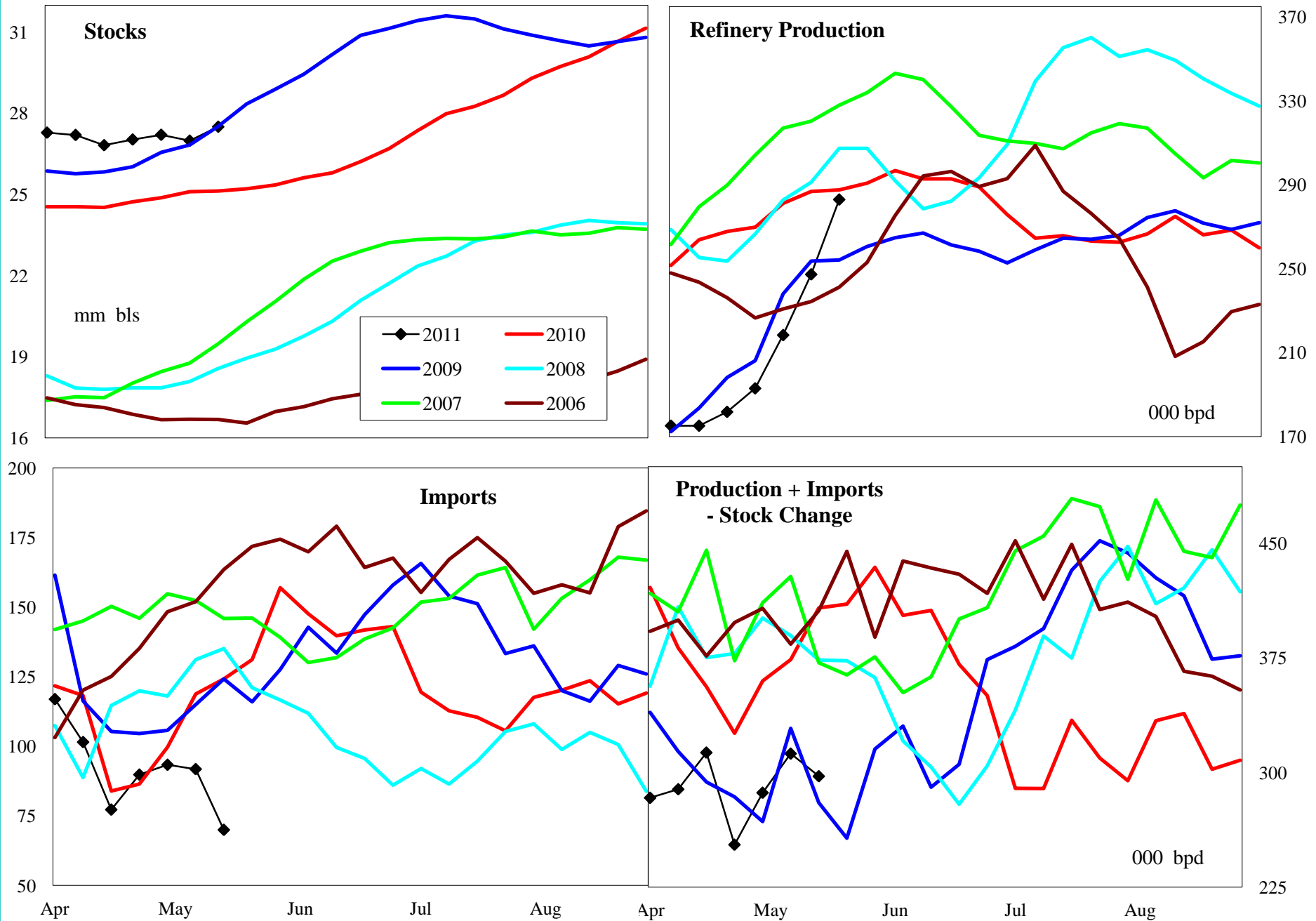
2

0.4

# PADD 1 Distillate Stocks by Region



# PADD 1 Low Sulfur Distillate Supply



**4 wk avg variance to prior year**

000 bpd (000 bbls stks)

% change

Stocks

2,631

10.6

Production

-60

-20.9

Imports

-17

-16.5

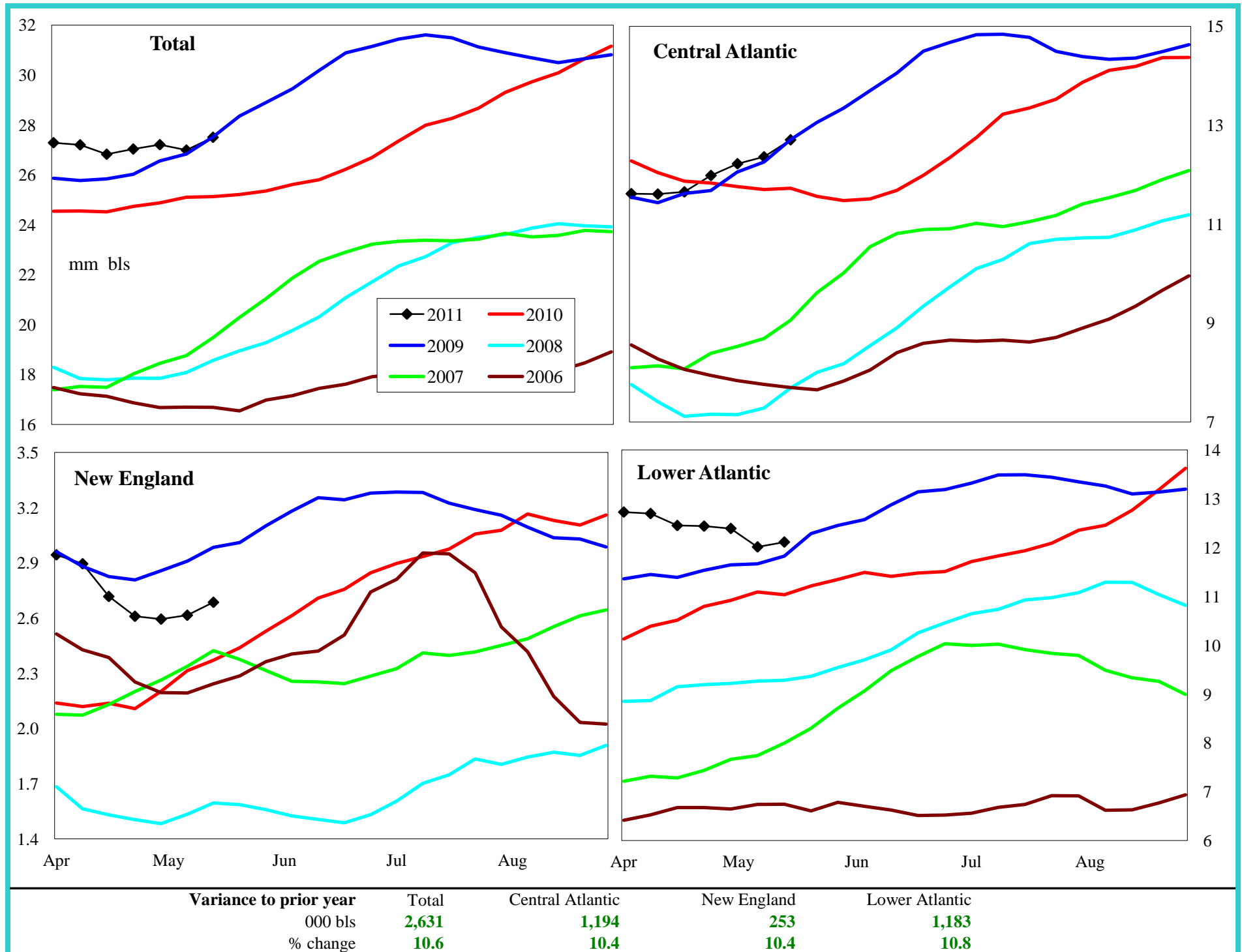
Prod + Imp - Stk chg

-40

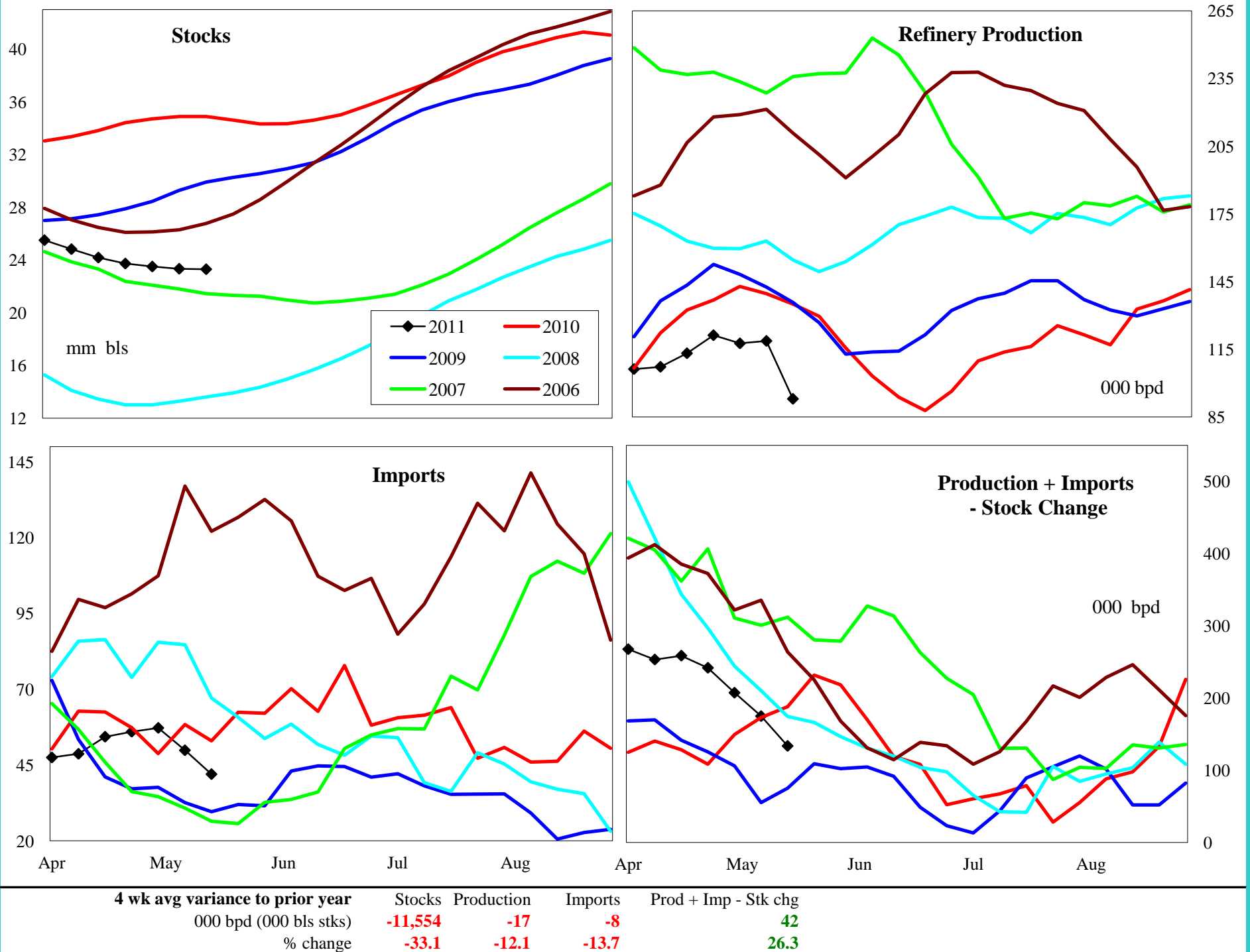
-10.5



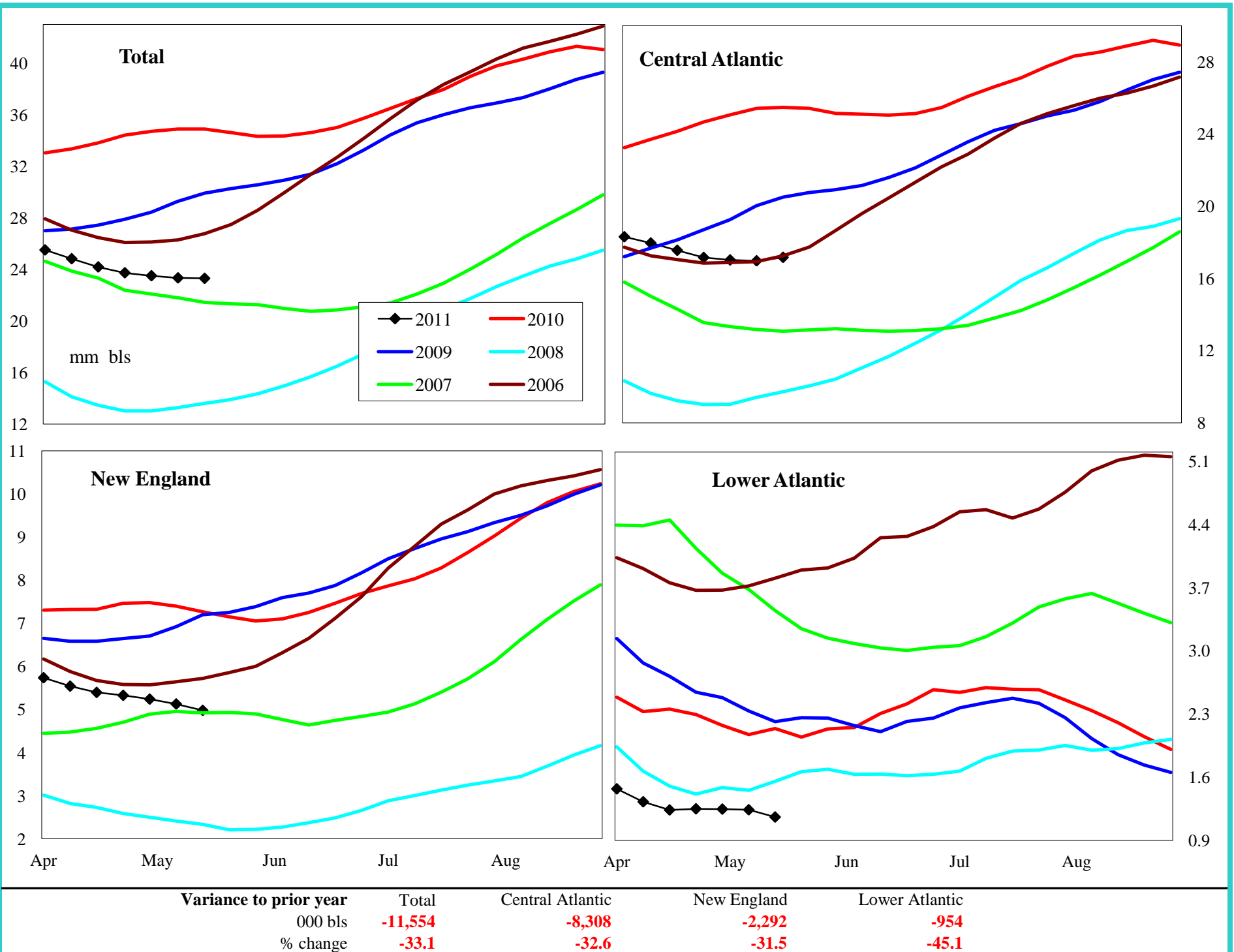
# PADD 1 Low Sulfur Distillate Stocks by Region



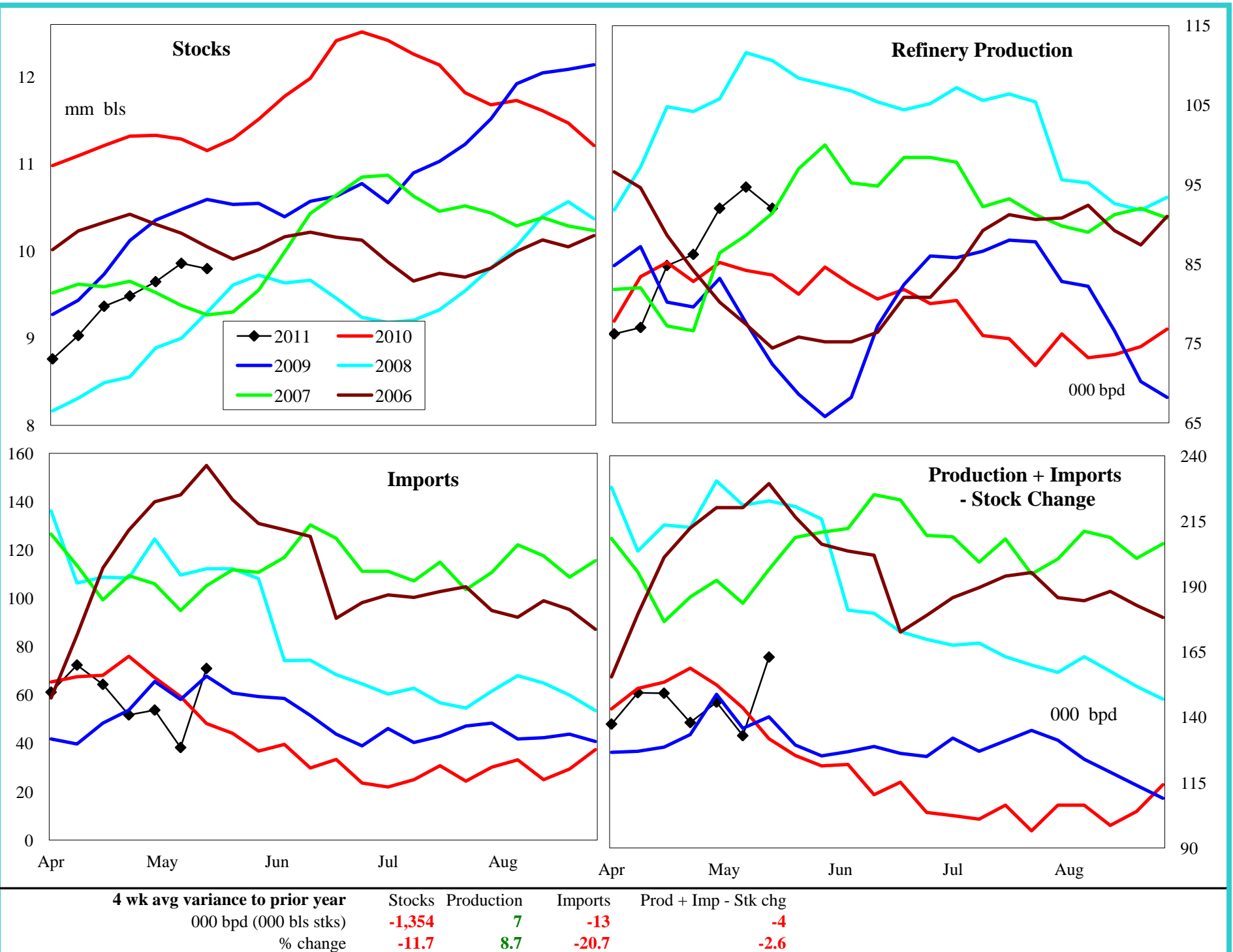
# PADD 1 High Sulfur Distillate Supply



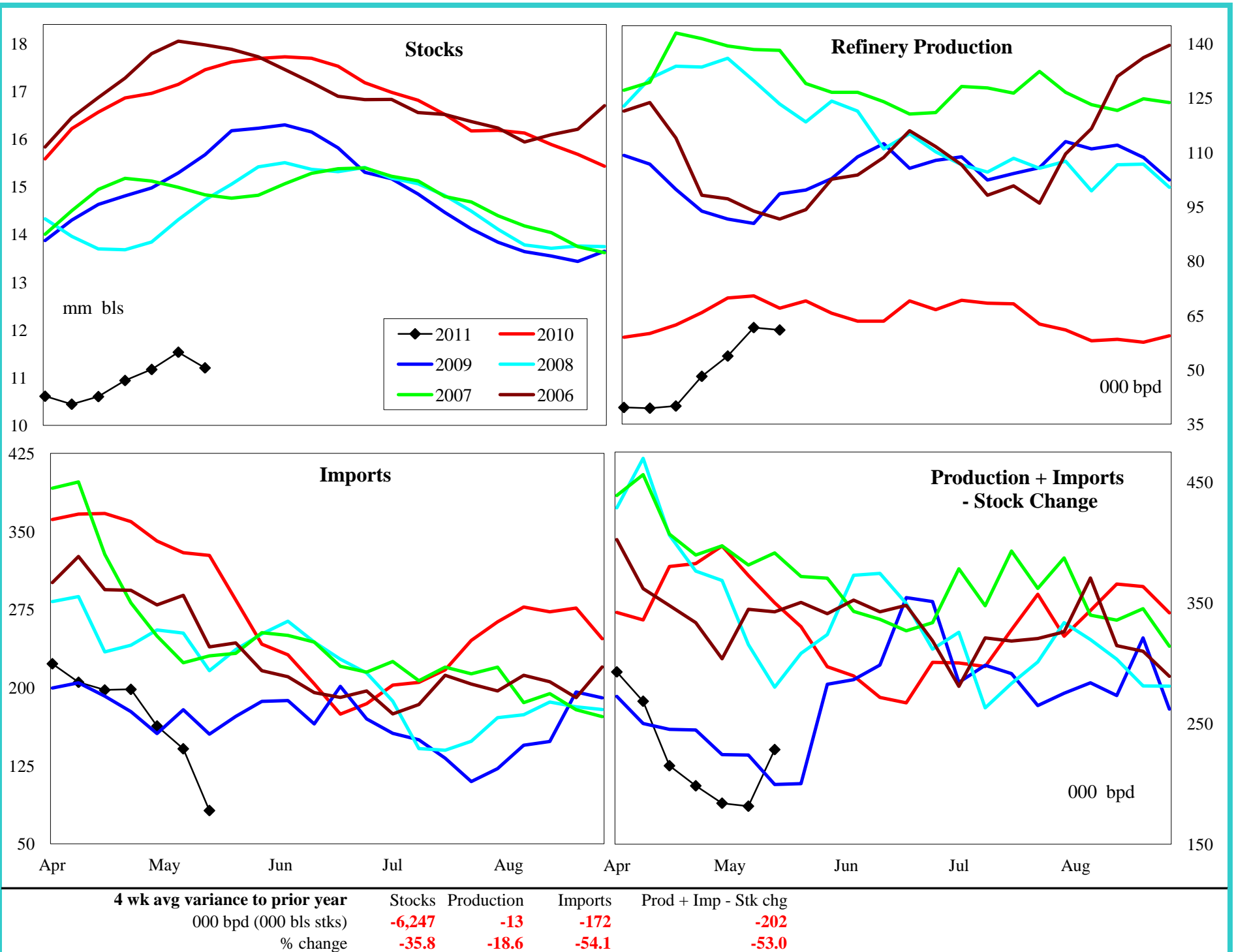
## PADD 1 High Sulfur Distillate Stocks by Region



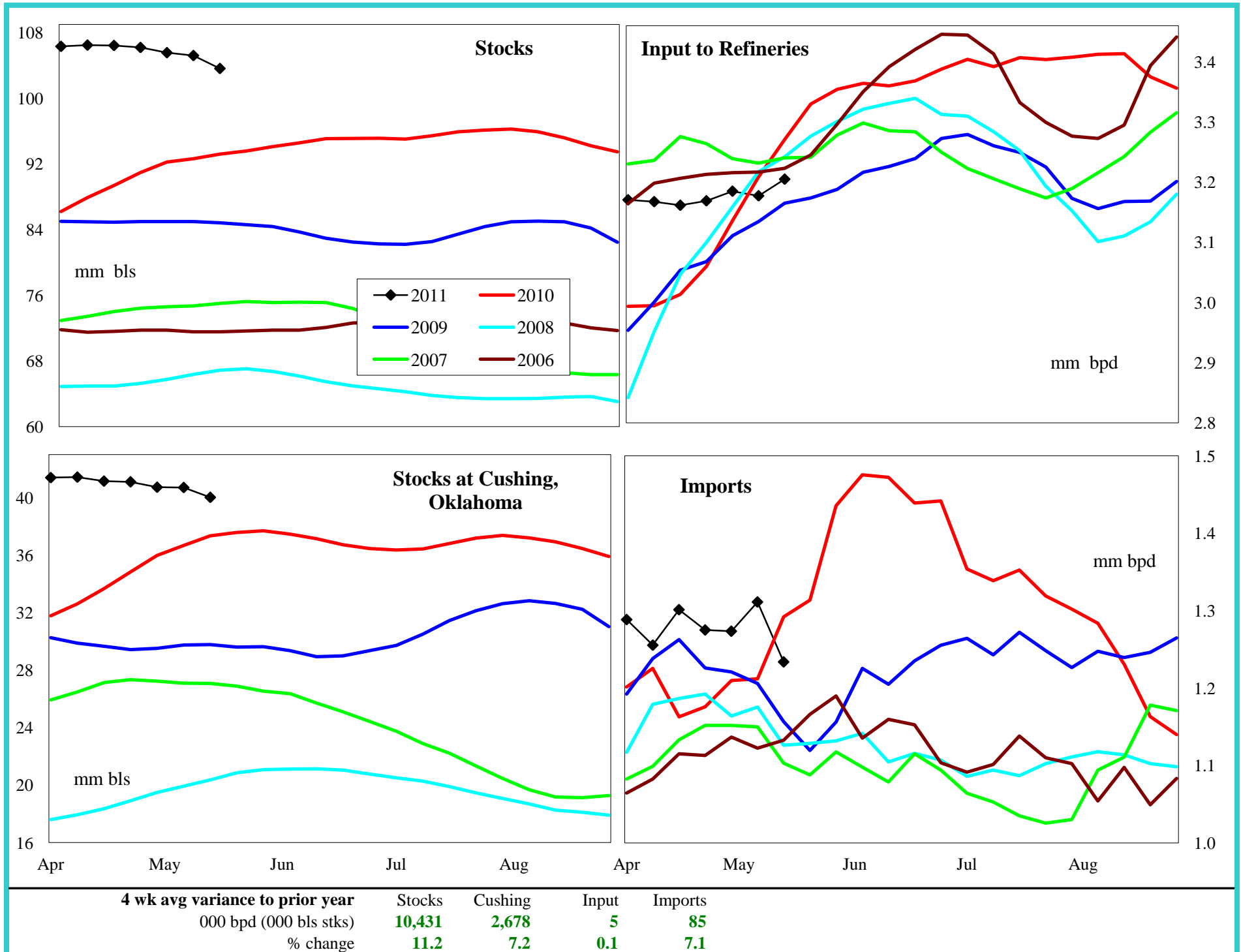
# PADD 1 Jet Fuel Supply



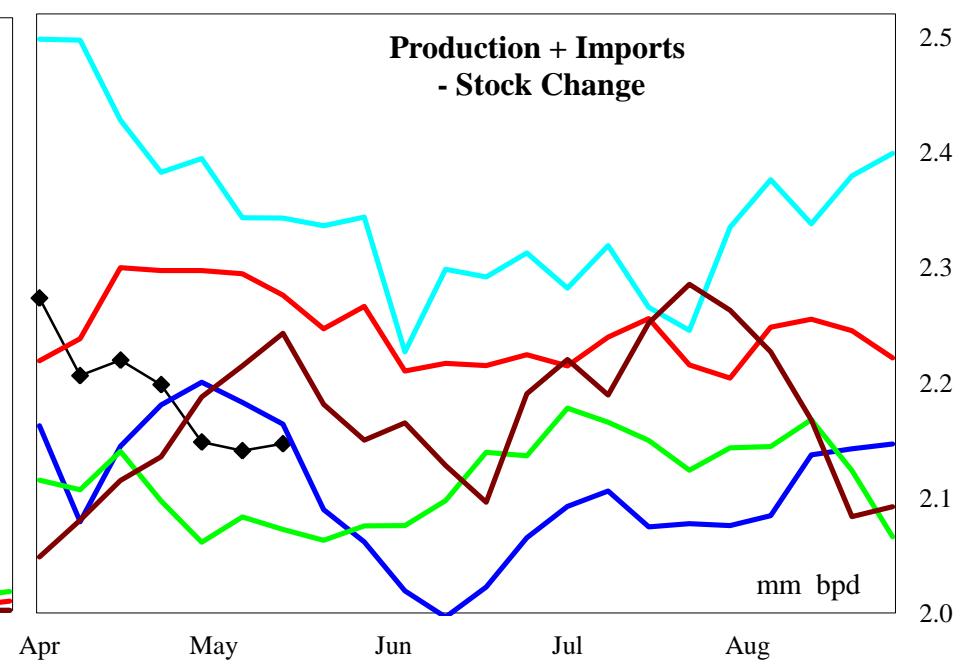
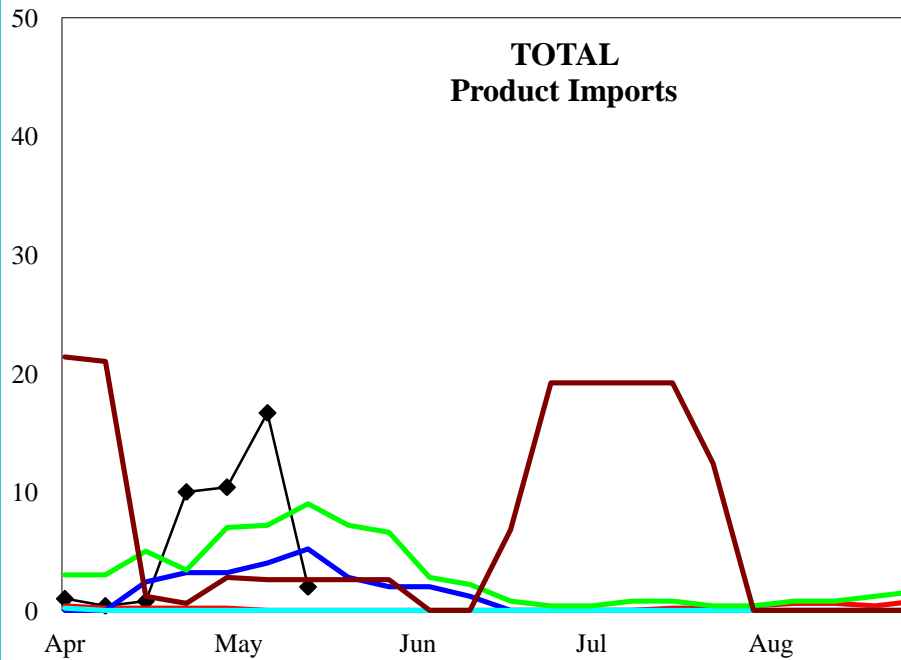
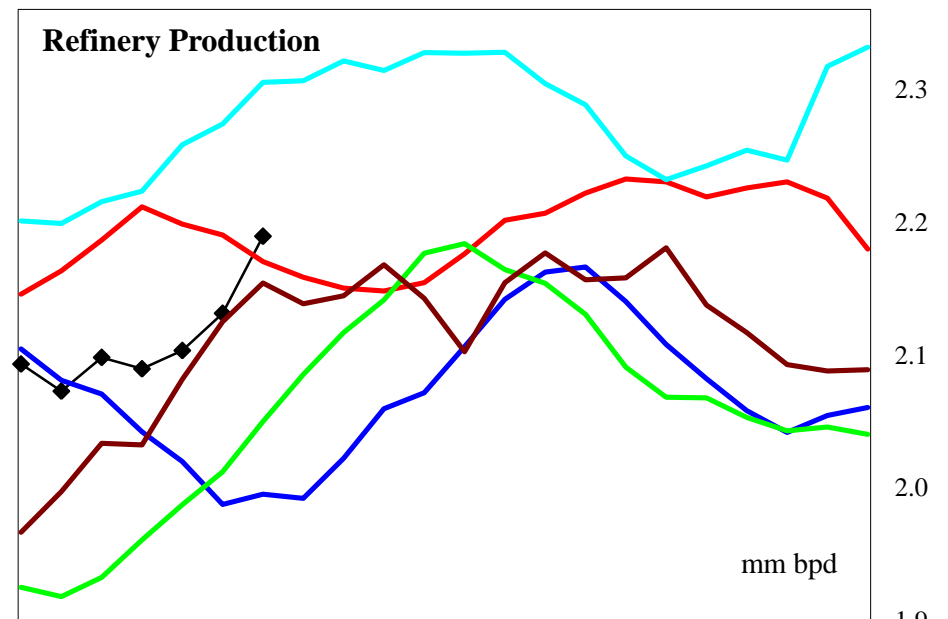
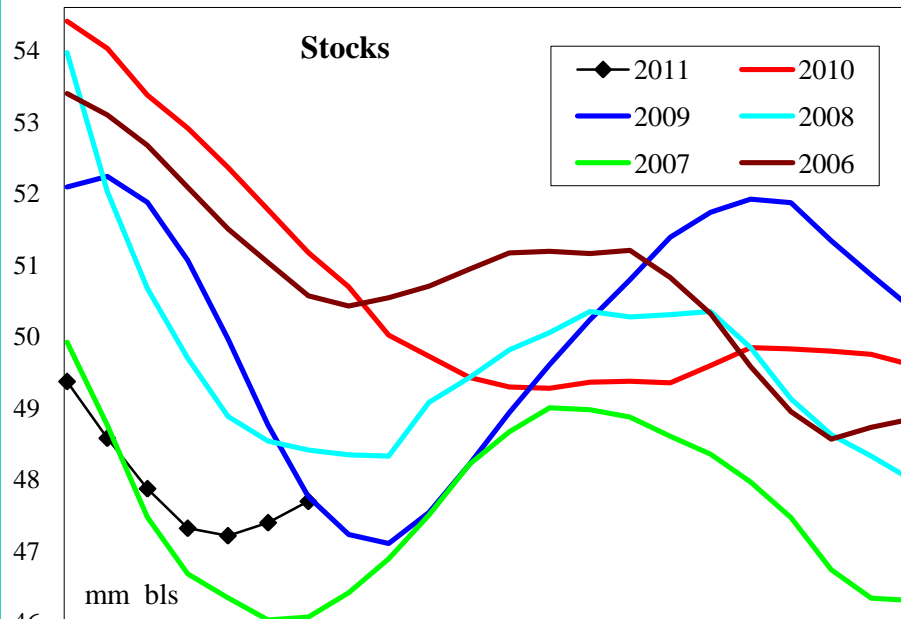
# PADD 1 Residual Fuel Oil Supply



# PADD 2 Crude Oil Supply and Refining



# PADD 2 Gasoline Supply

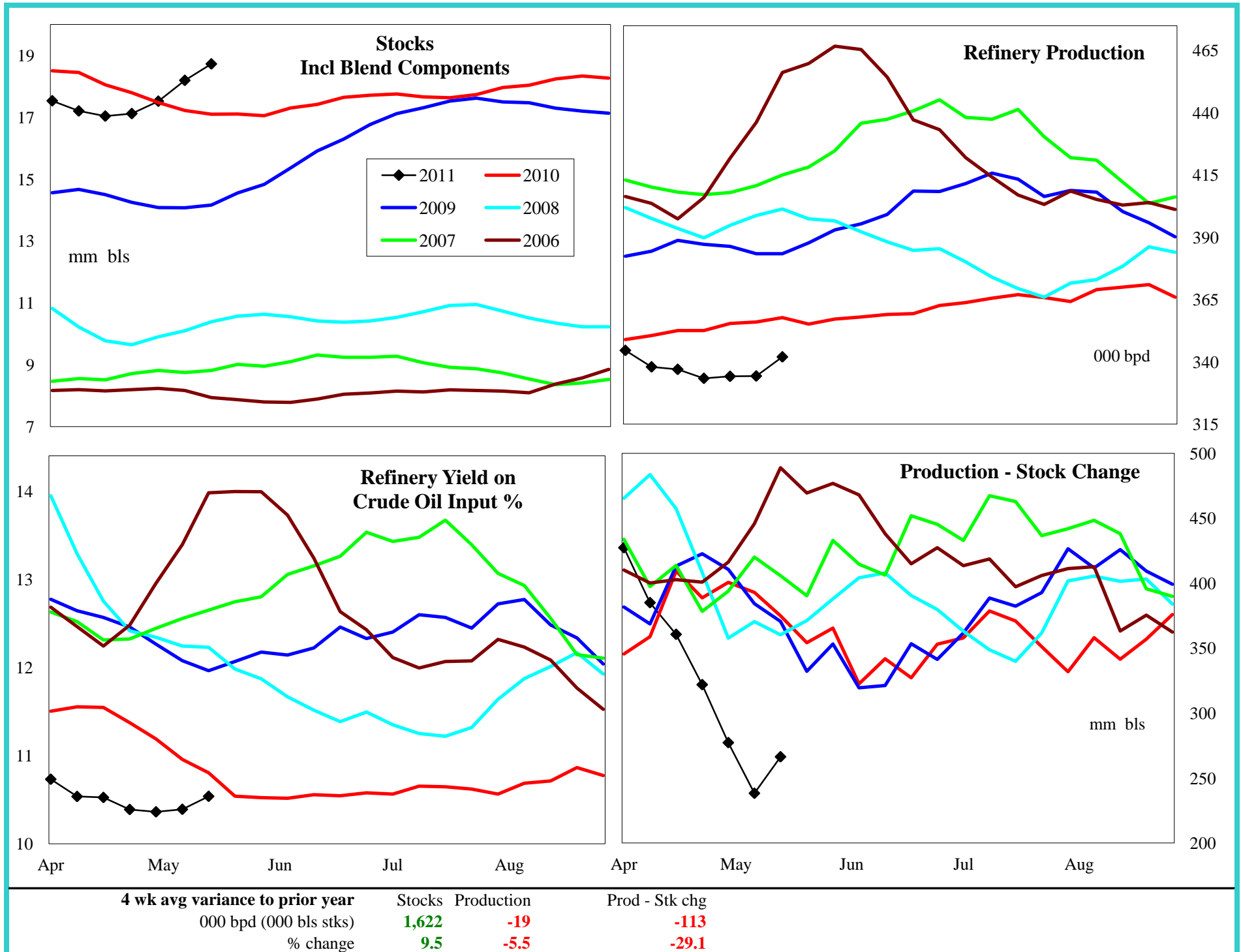


**4 wk avg variance to prior year**  
000 bpd (000 bls stks)  
% change

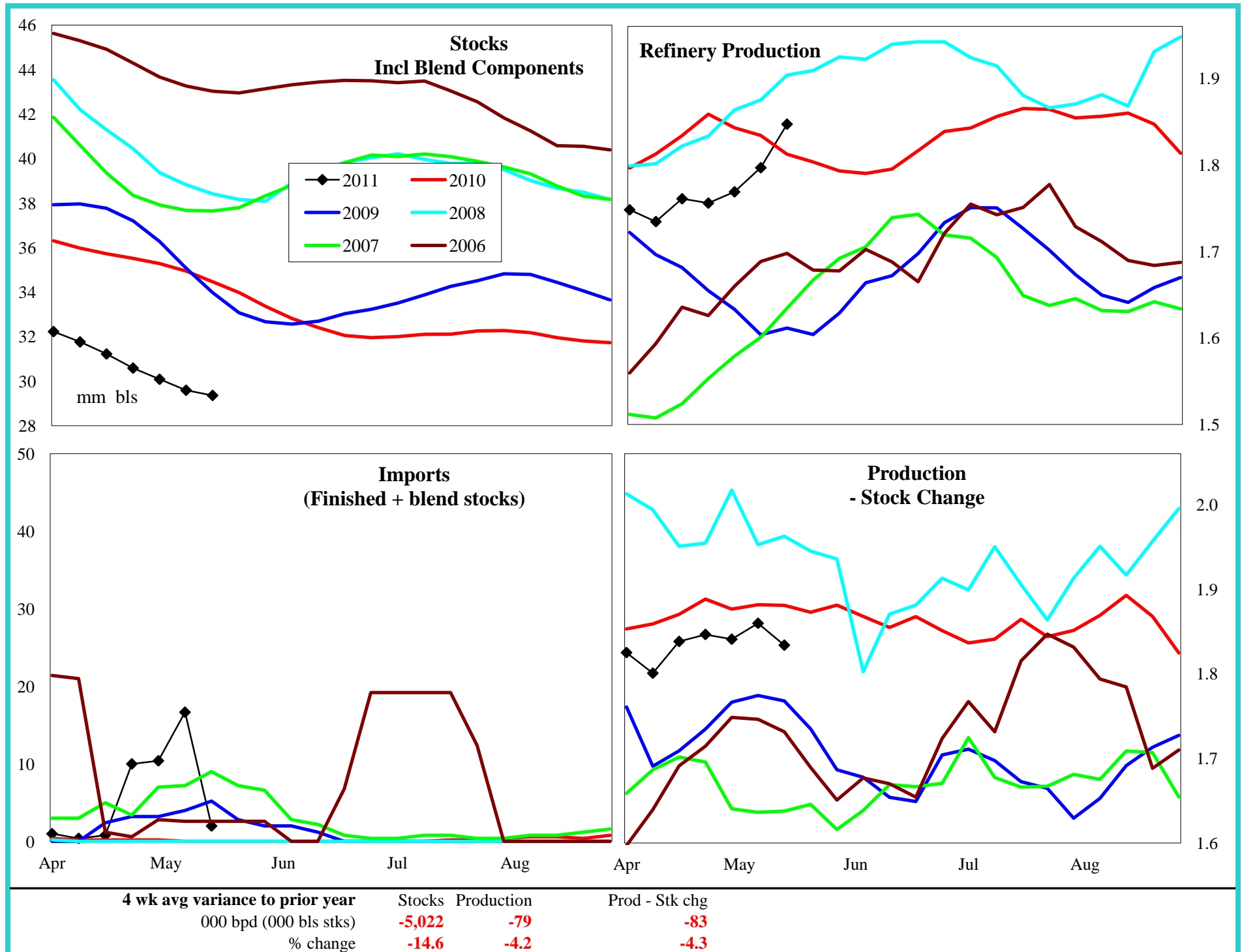
Stocks	Production	Imports	Prod + Imp - Stk chg
-3,481	-102	13	-245
-6.8	-4.6	#DIV/0!	-10.4



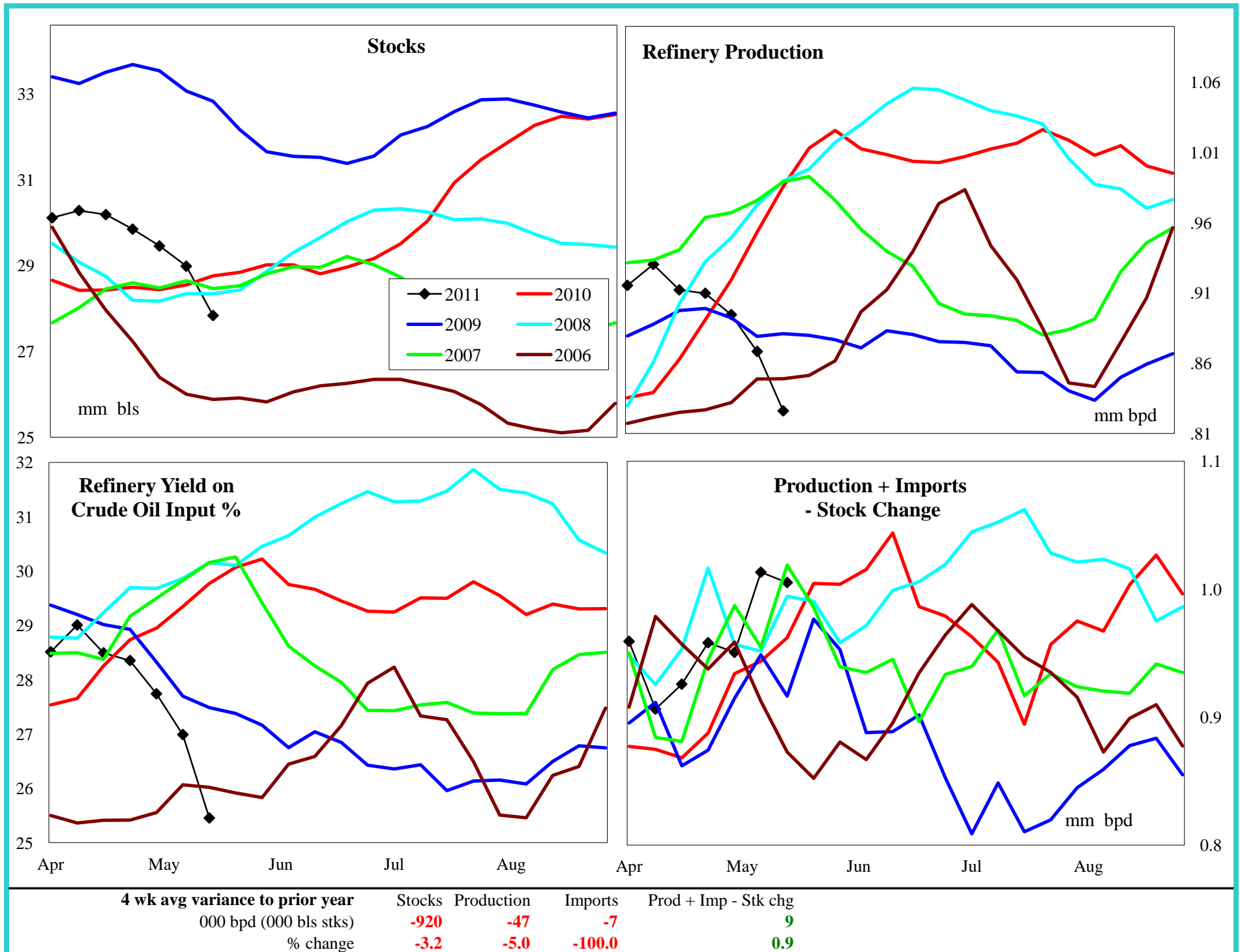
# PADD 2 Reformulated Gasoline Supply



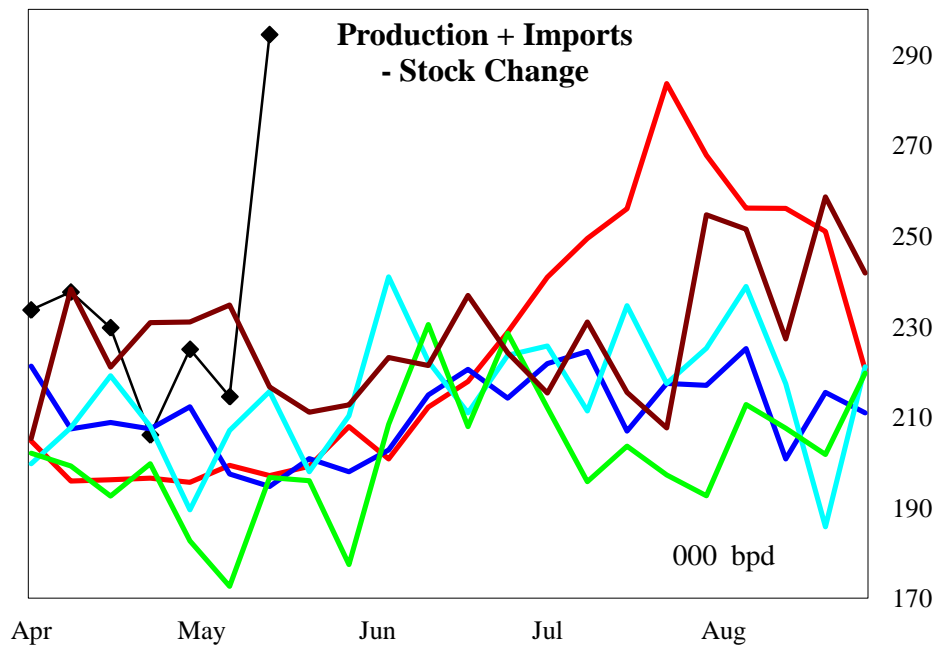
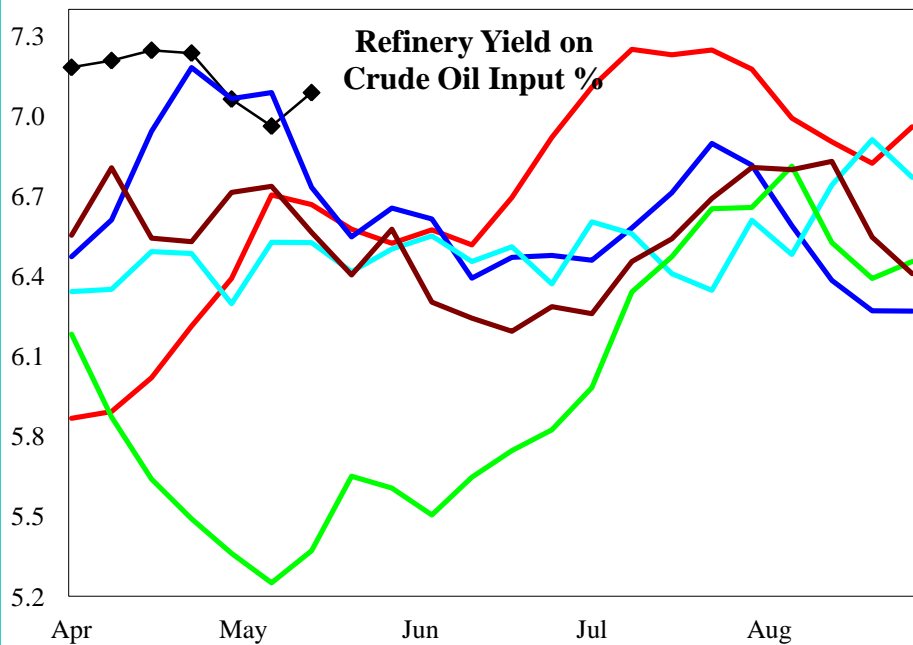
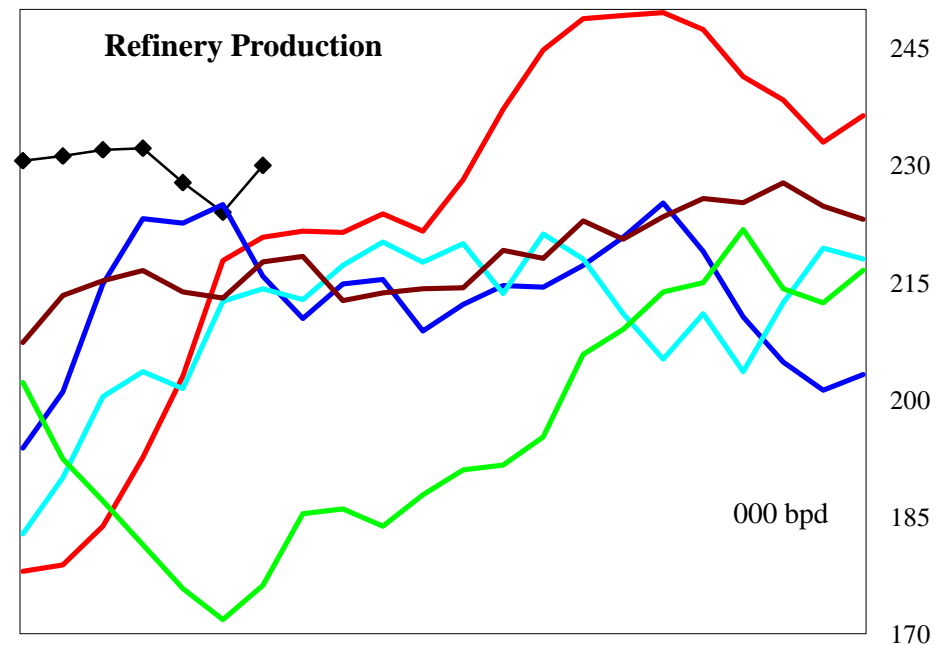
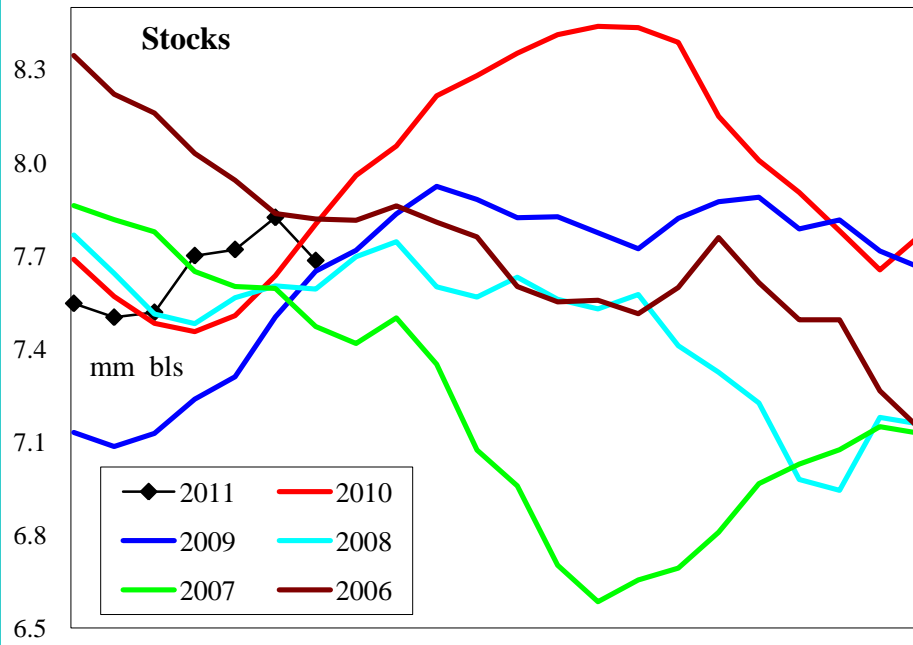
## PADD 2 Conventional Gasoline Supply



# PADD 2 Distillate Supply



# PADD 2 Jet Fuel Supply



**4 wk avg variance to prior year**

000 bpd (000 bls stks)

% change

Stocks

-117

-1.5

Production

16

7.3

Imports

0

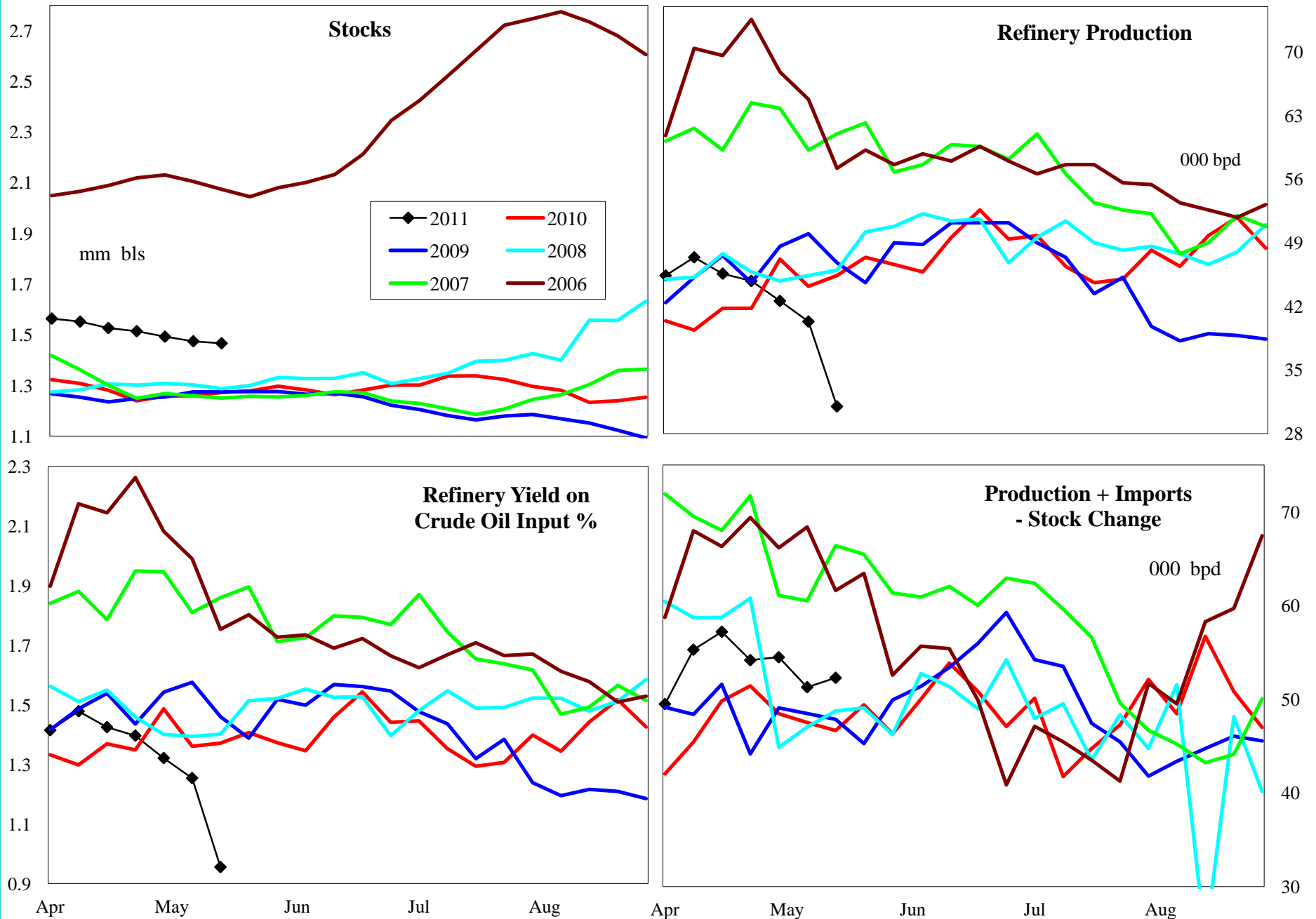
#DIV/0!

Prod + Imp - Stk chg

28

14.4

# PADD 2 Residual Fuel Oil Supply



**4 wk avg variance to prior year**

000 bpd (000 bls stks)

% change

Stocks

Production

Imports

Prod + Imp - Stk chg

**194**

**-1**

**6**

**7**

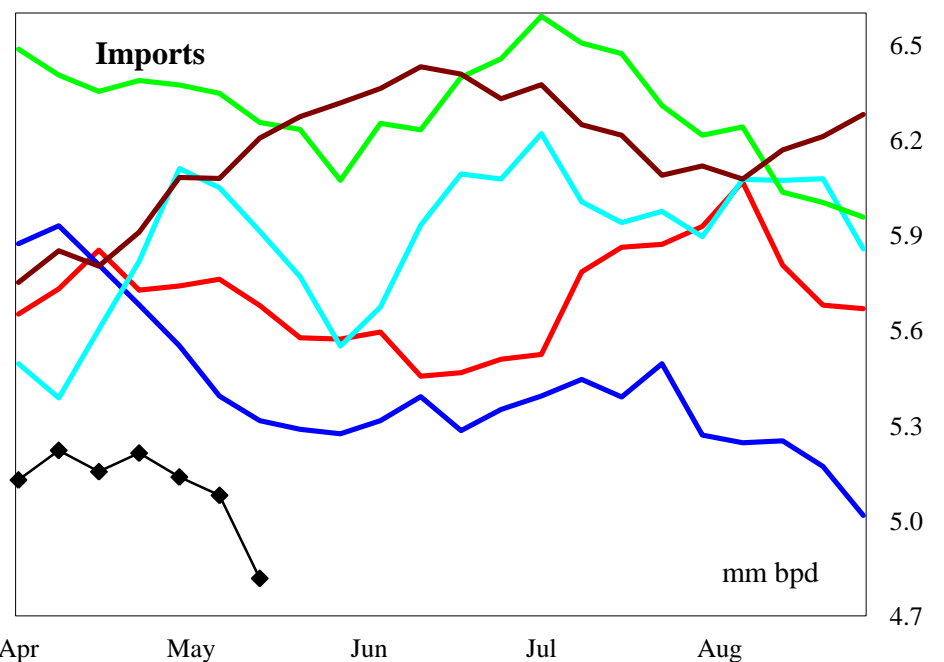
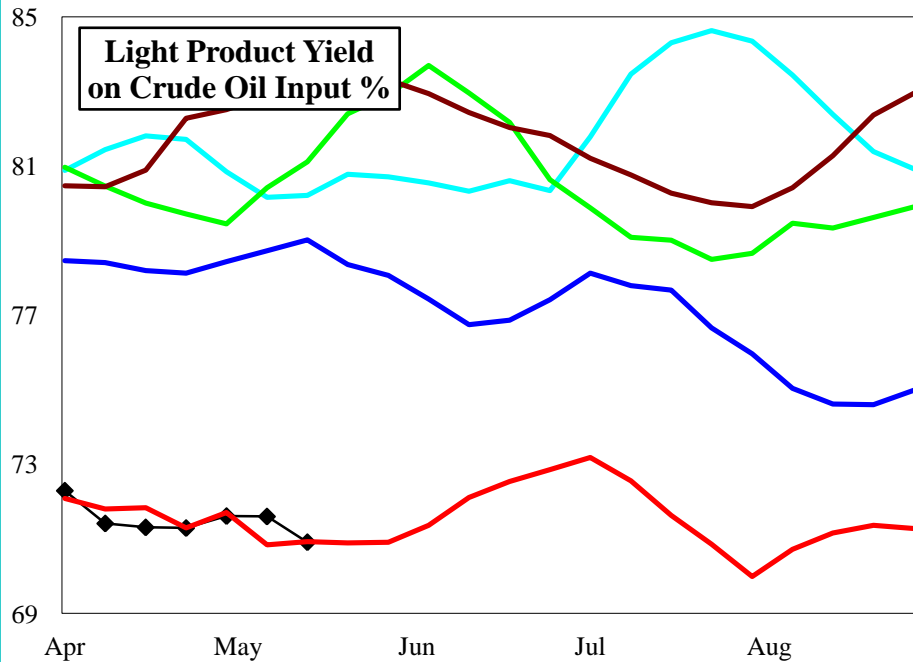
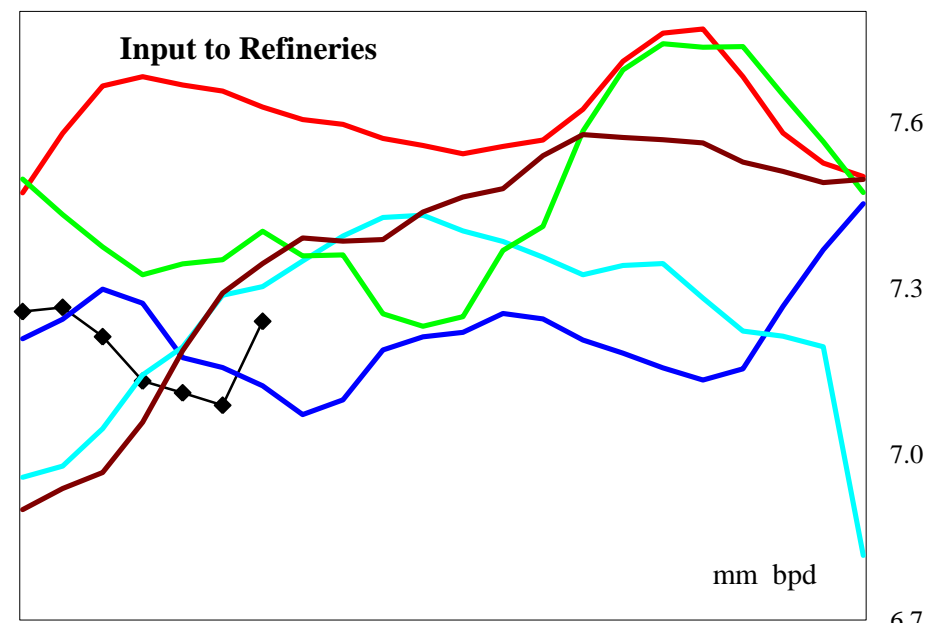
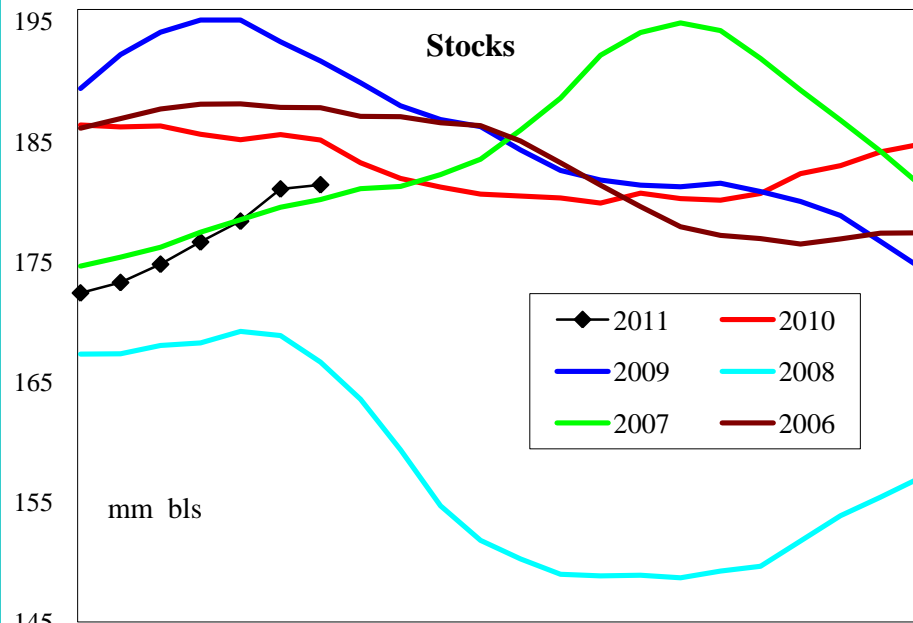
**15.2**

**-2.7**

**153.3**

**15.0**

# PADD 3 Crude Oil Supply and Refining



**4 wk avg variance to prior year**

000 bpd (000 bls stks)

% change

Stocks

**-3,726**

**-2.0**

Input

**-579**

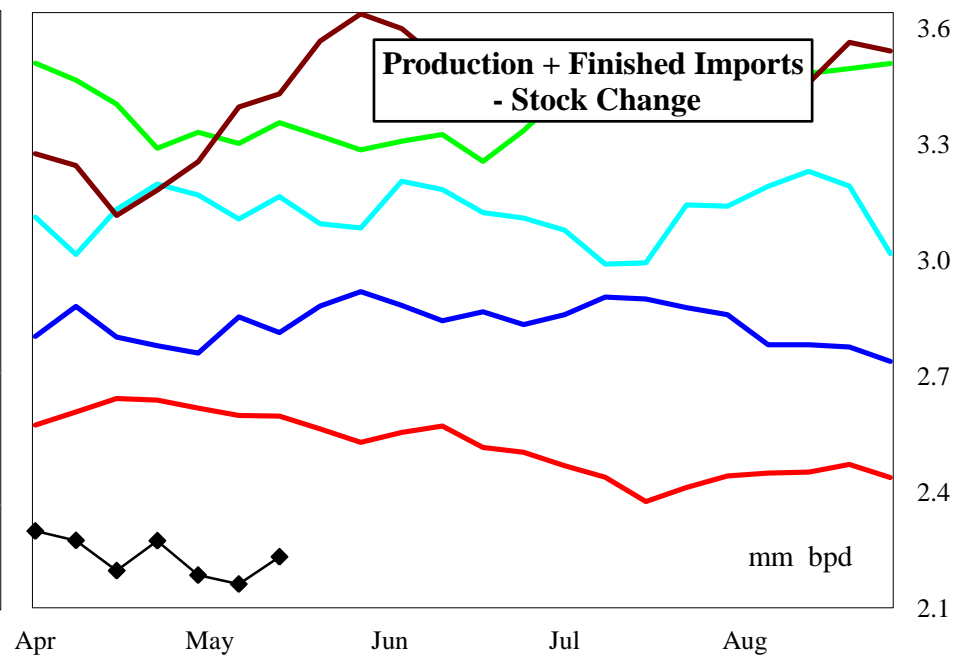
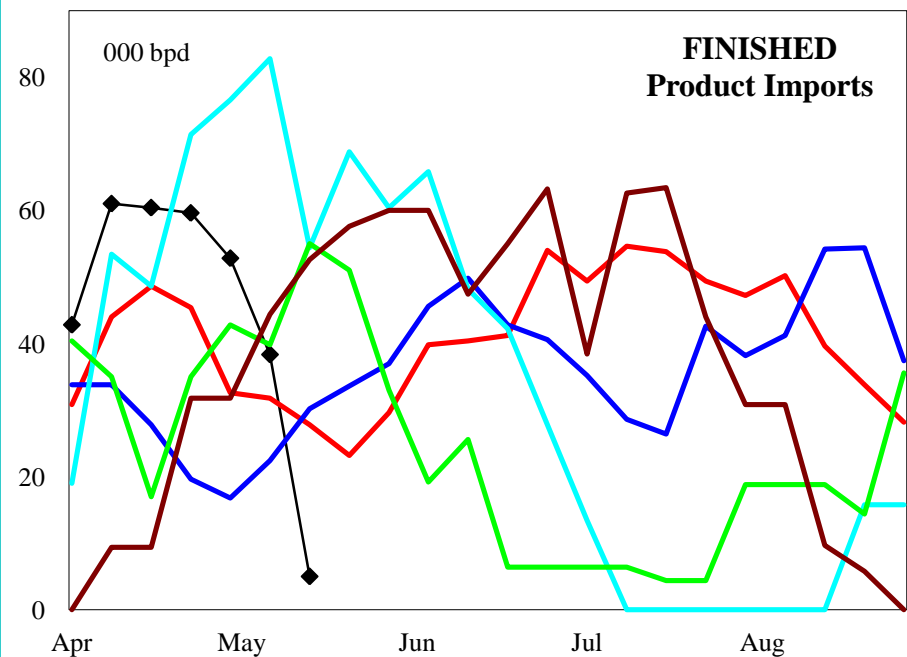
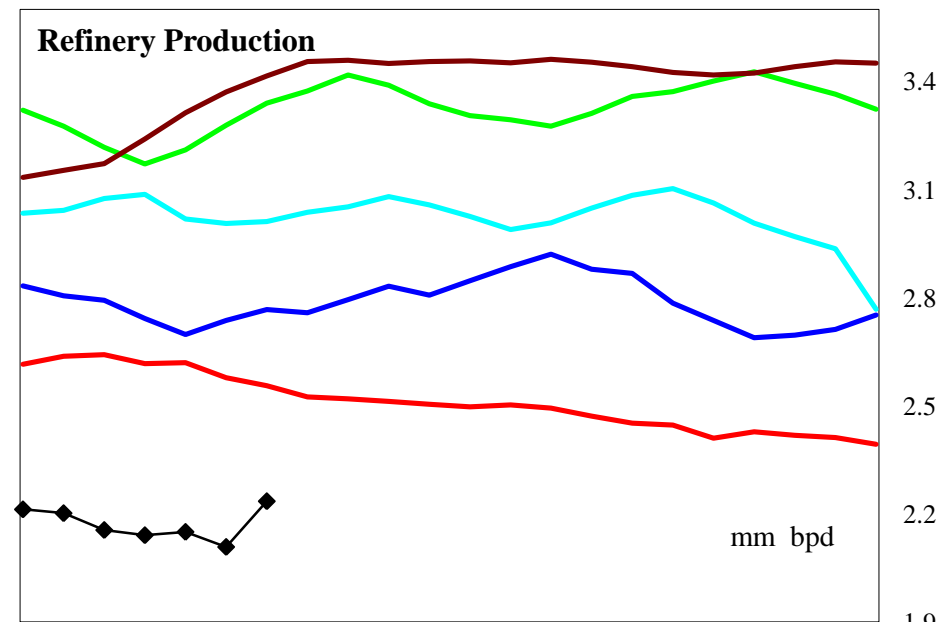
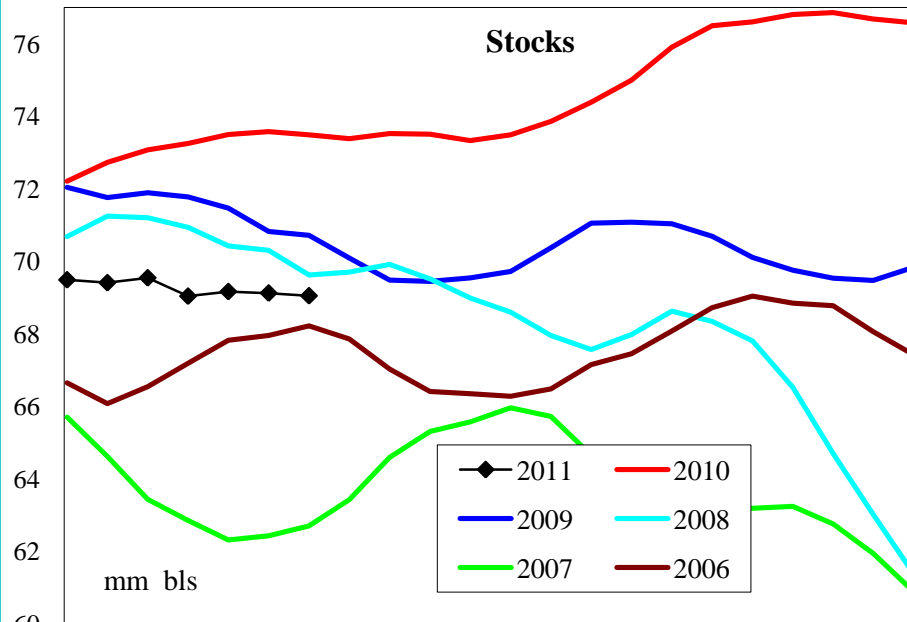
**-7.5**

Imports

**-544**

**-9.5**

# PADD 3 Gasoline Supply



**4 wk avg variance to prior year**

000 bpd (000 bls stks)

% change

Stocks

**-4,566**

**-6.2**

Production

**-467**

**-18.1**

Fin Impt

**23**

**79.1**

Blend Impt

**82**

**133.3**

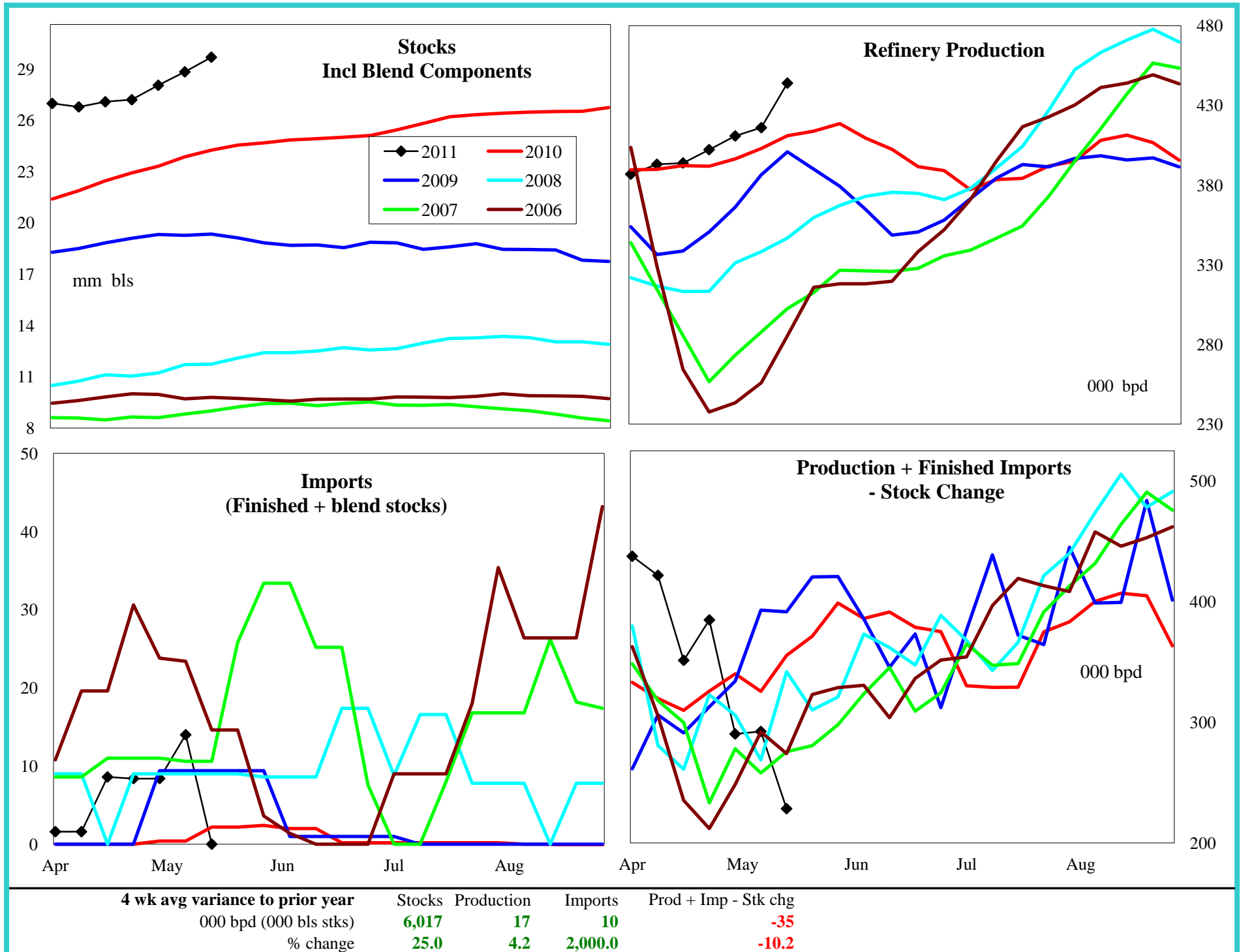
Prod + Imp - Stk chg

**-433**

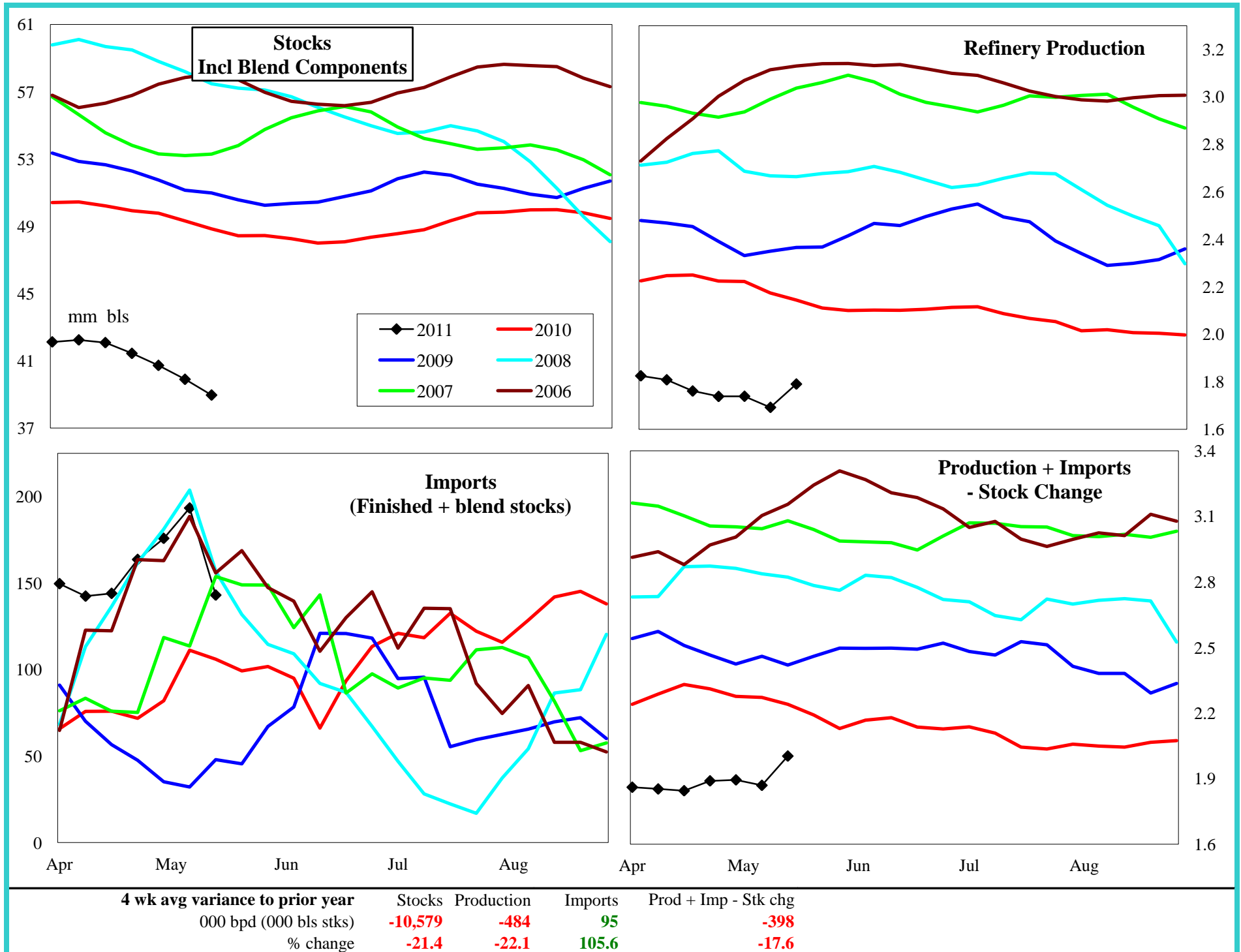
**-16.6**



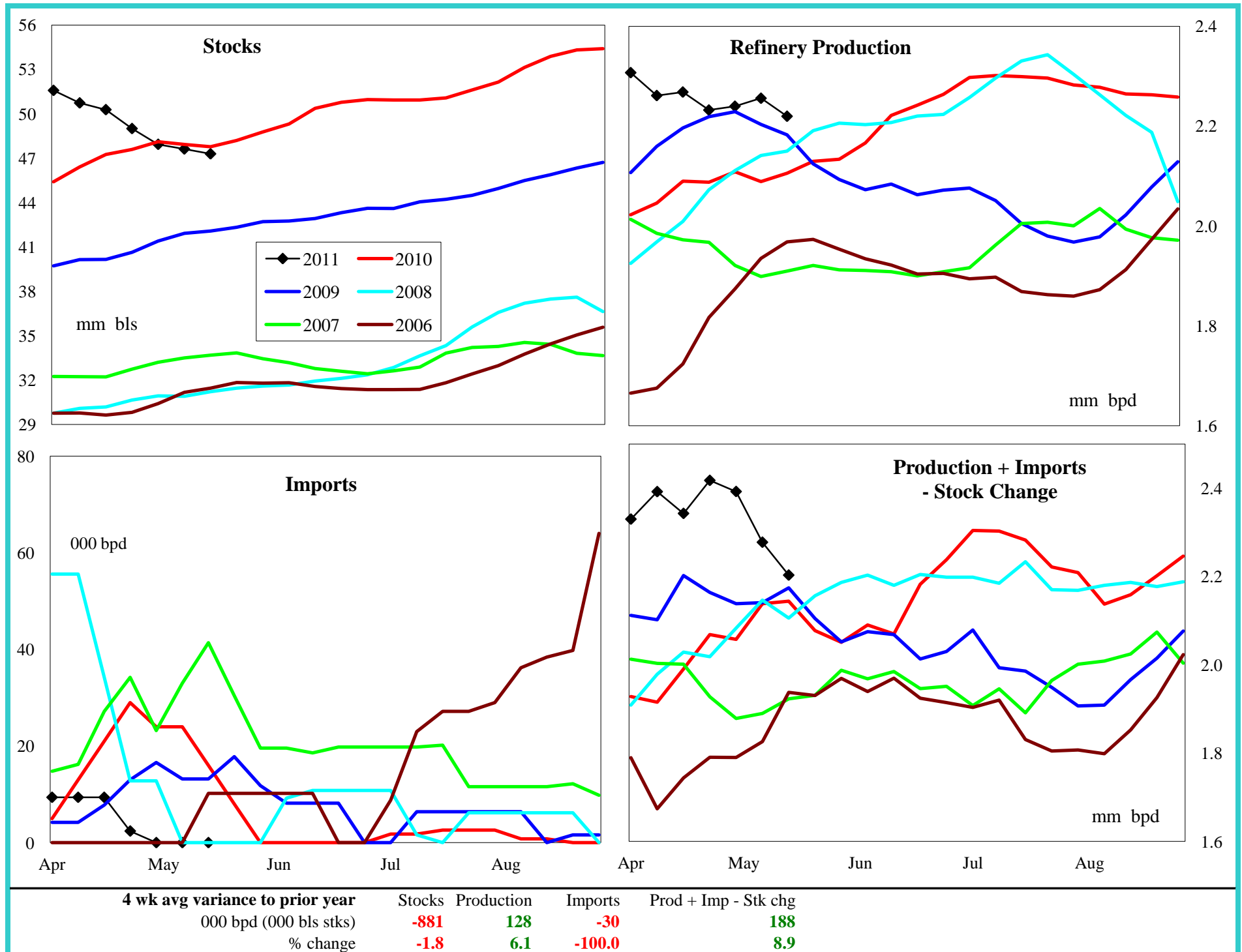
# PADD 3 Reformulated Gasoline Supply



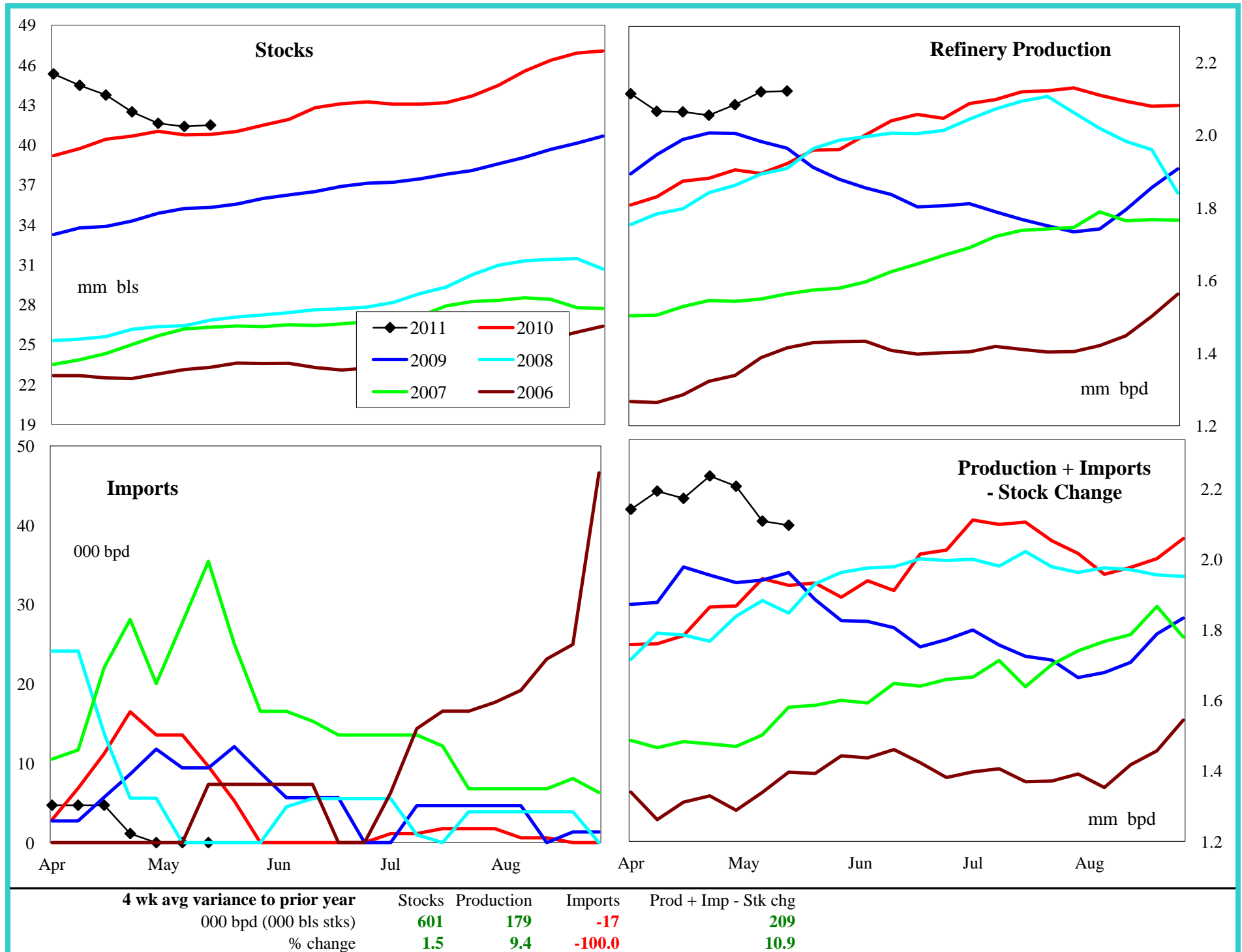
# PADD 3 Conventional Gasoline Supply



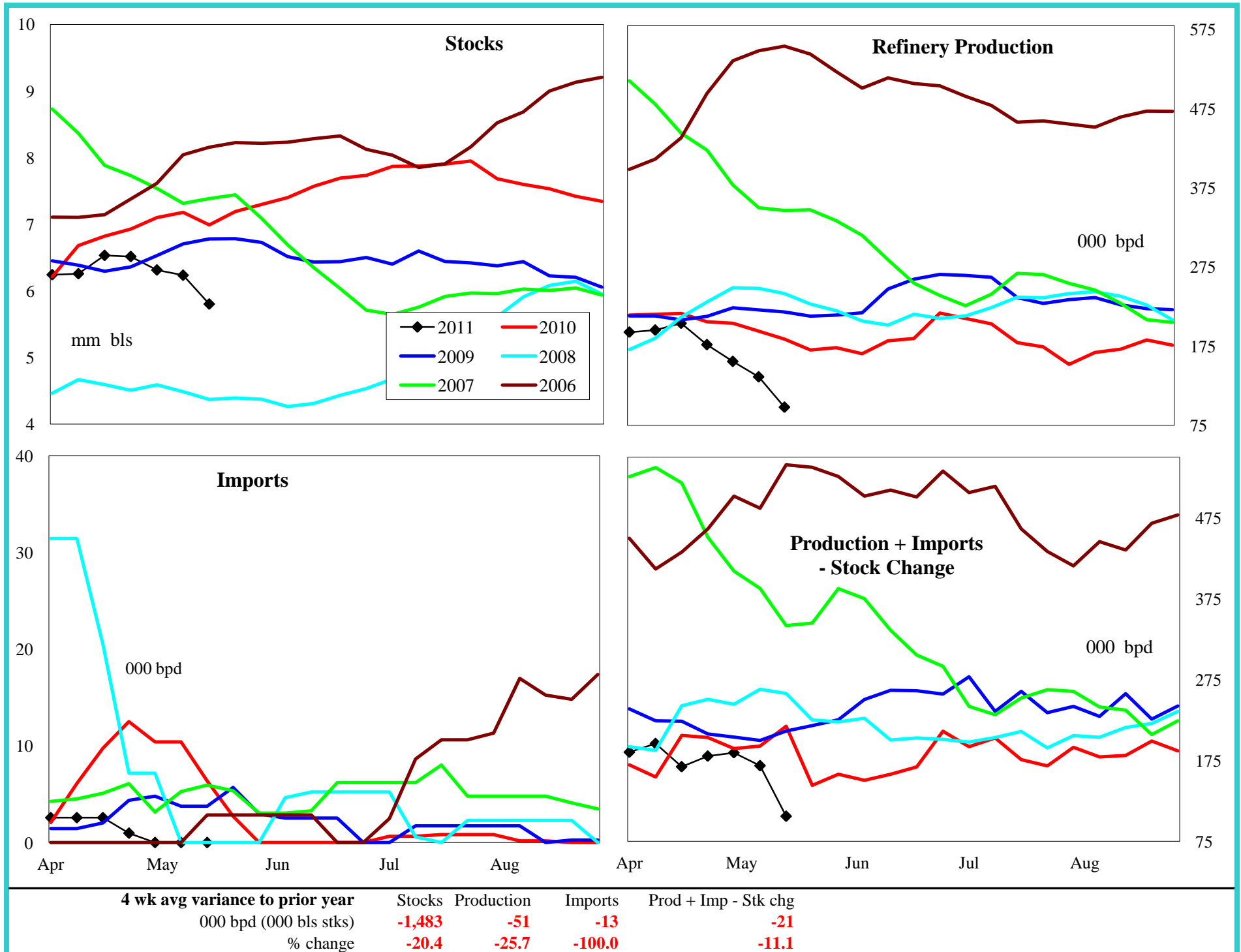
# PADD 3 Distillate Supply



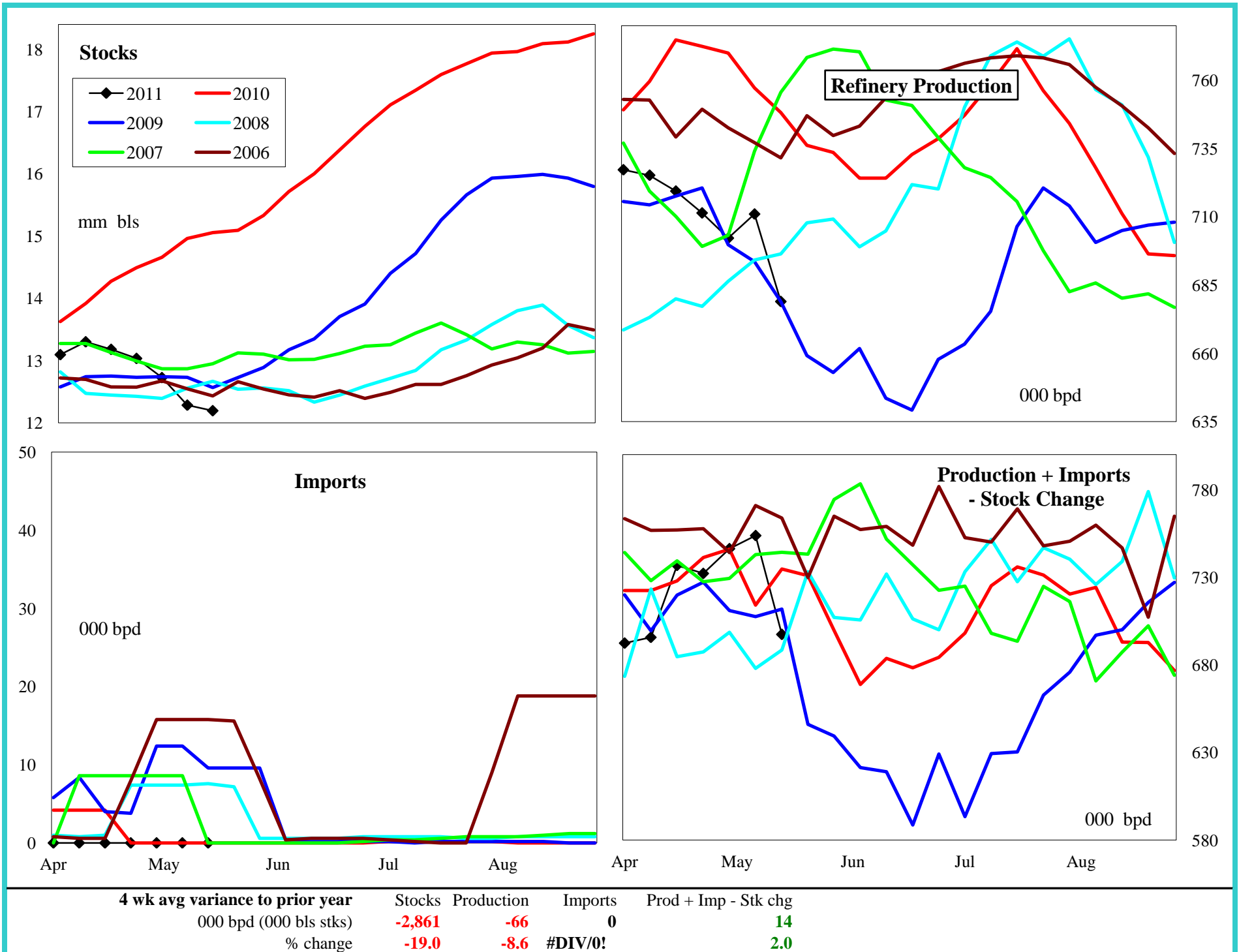
# PADD 3 Low Sulfur Distillate Supply



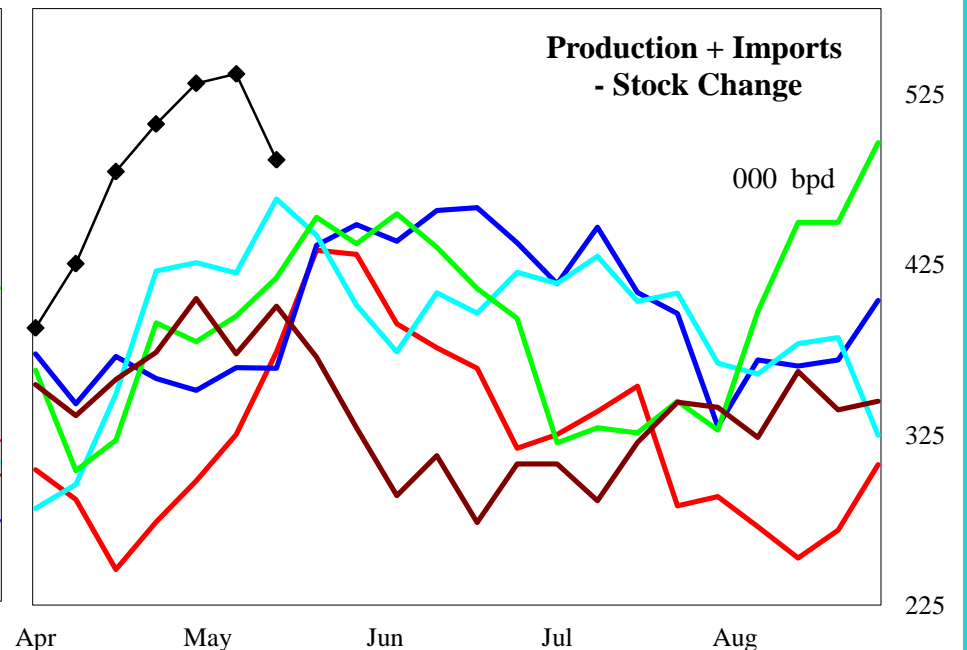
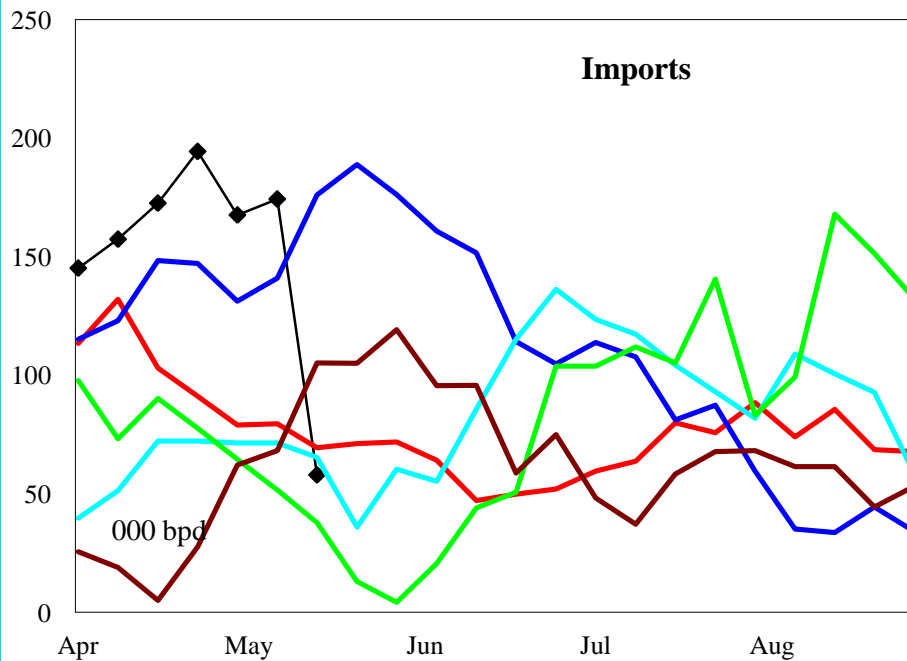
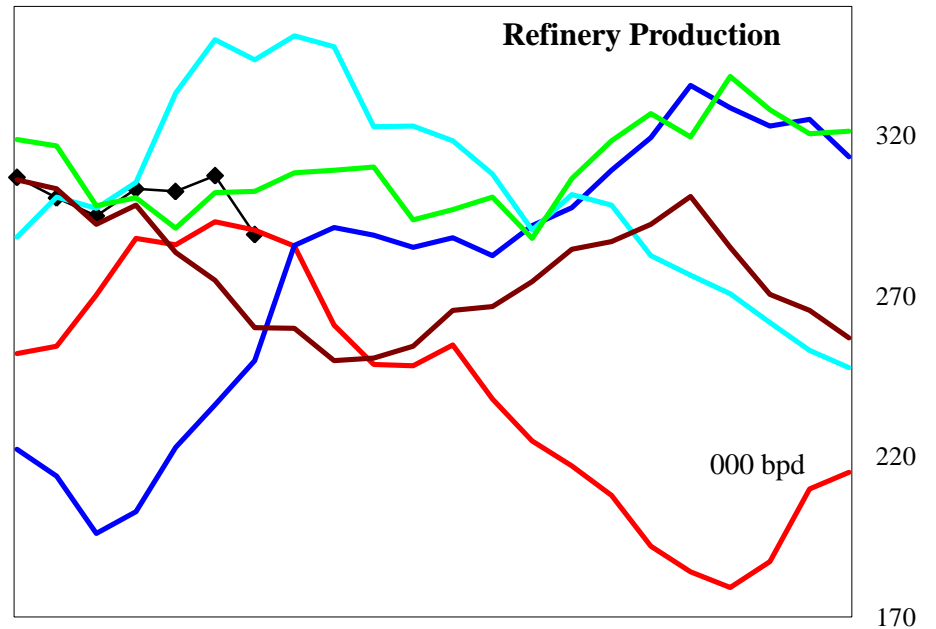
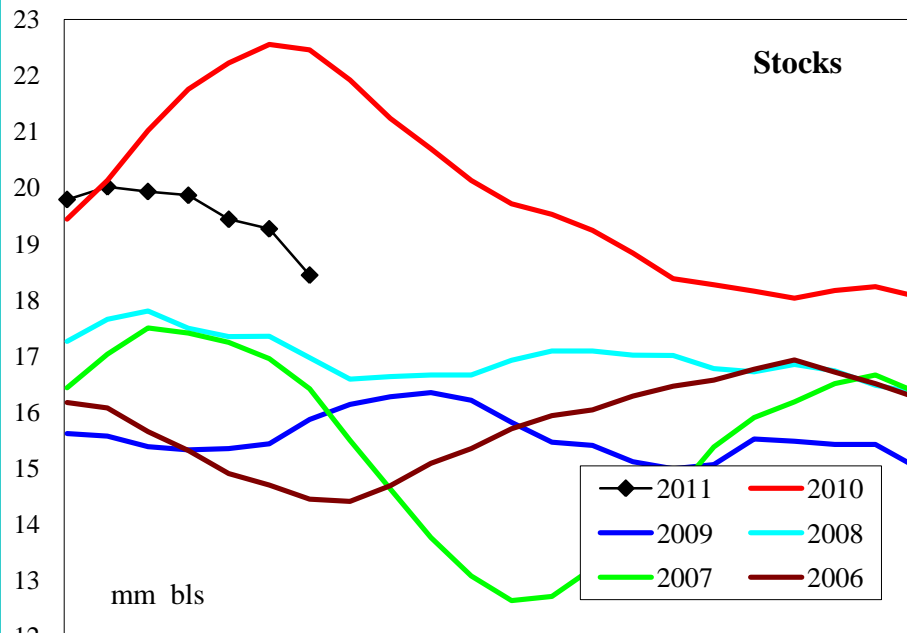
# PADD 3 High Sulfur Distillate Supply



# PADD 3 Jet Fuel Supply



# PADD 3 Residual Fuel Oil Supply



**4 wk avg variance to prior year**

000 bpd (000 bbls stks)

% change

Stocks

**-4,021**

**-17.9**

Production

**-2**

**-0.6**

Imports

**115**

**173.3**

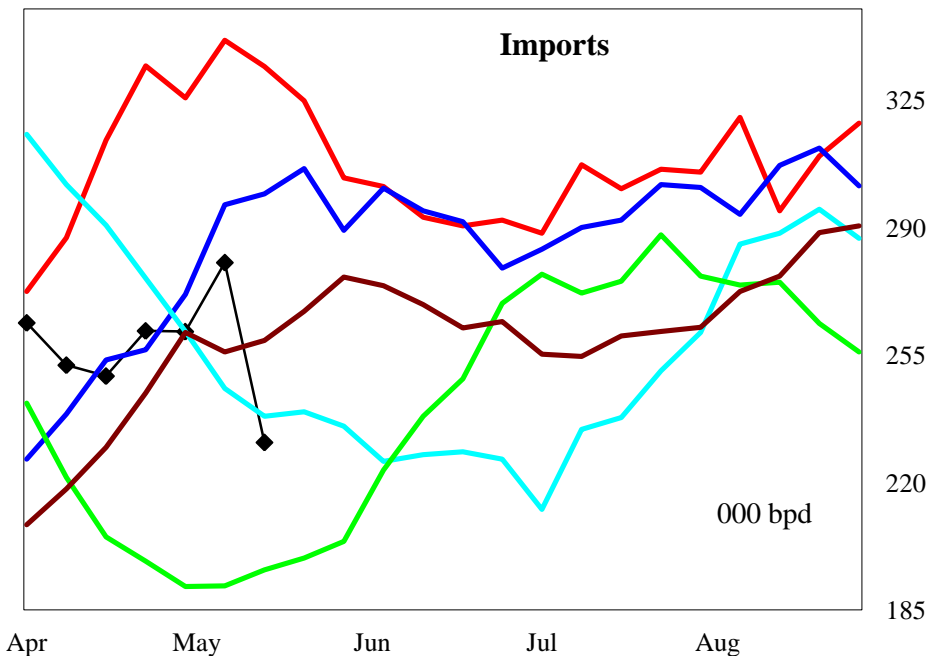
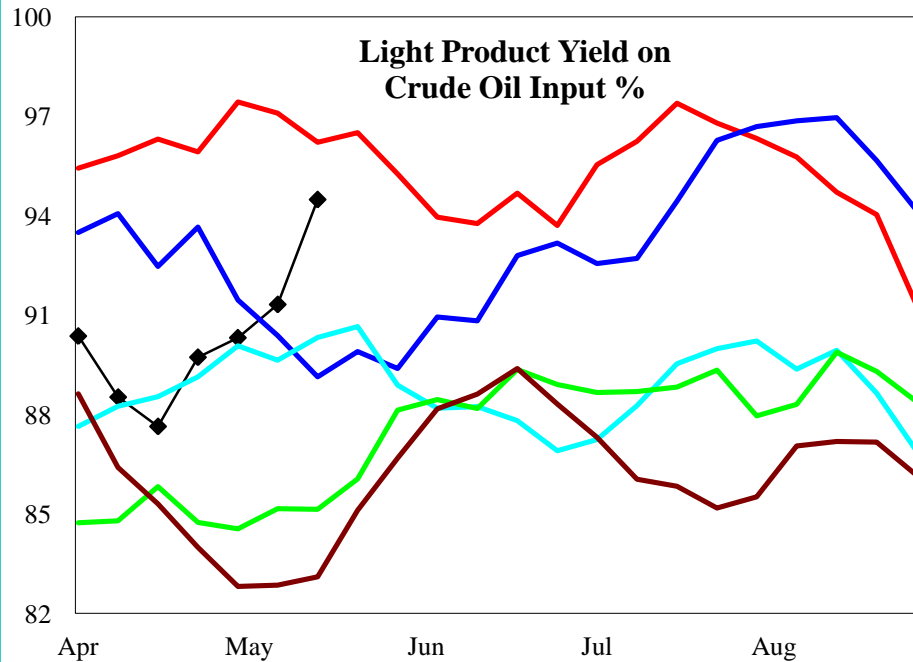
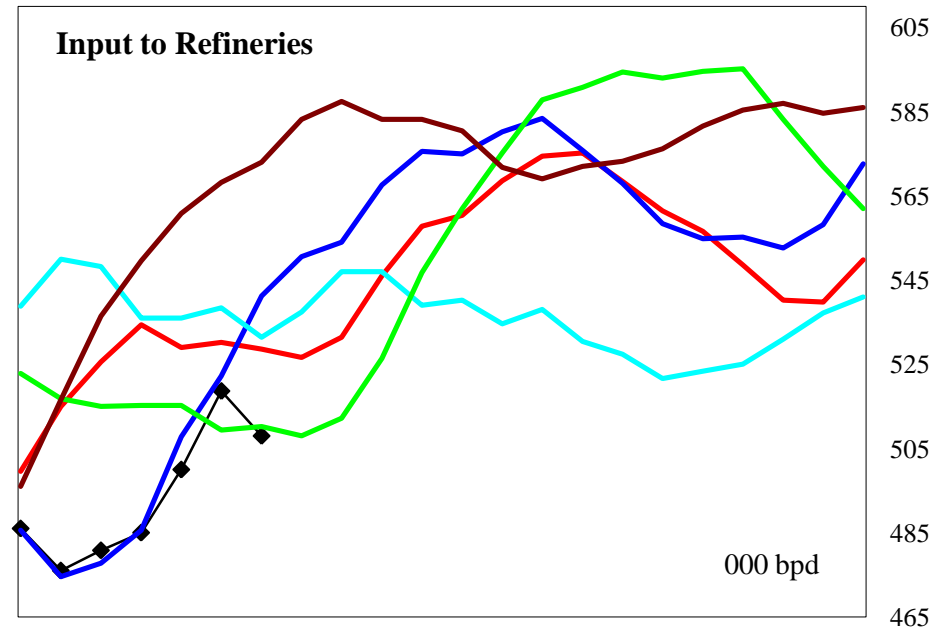
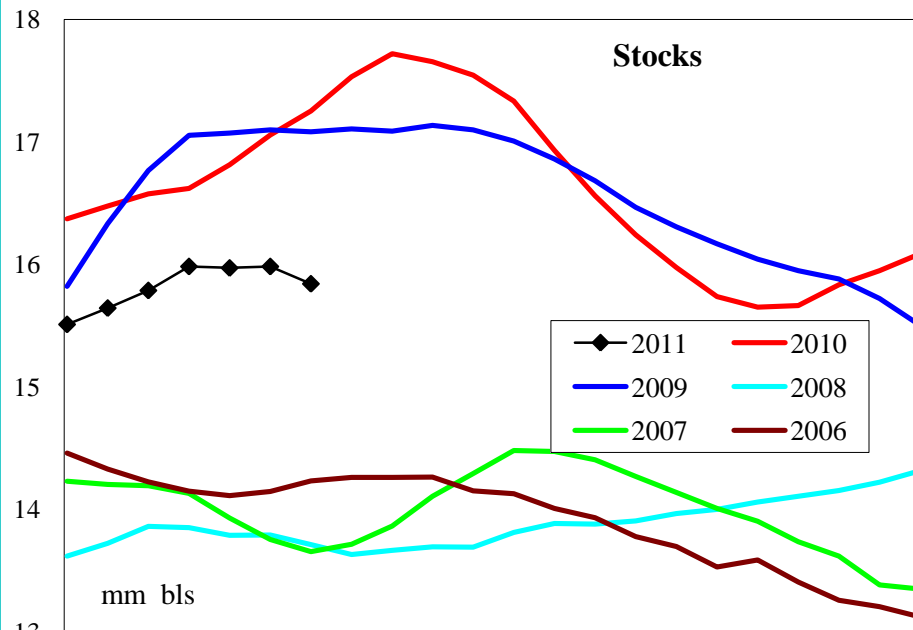
Prod + Imp - Stk chg

**206**

**64.2**



# PADD 4 Crude Oil Supply and Refining



**4 wk avg variance to prior year**

000 bpd (000 bls stks)

% change

Stocks

**-1,409**

**-8.2**

Input

**-23**

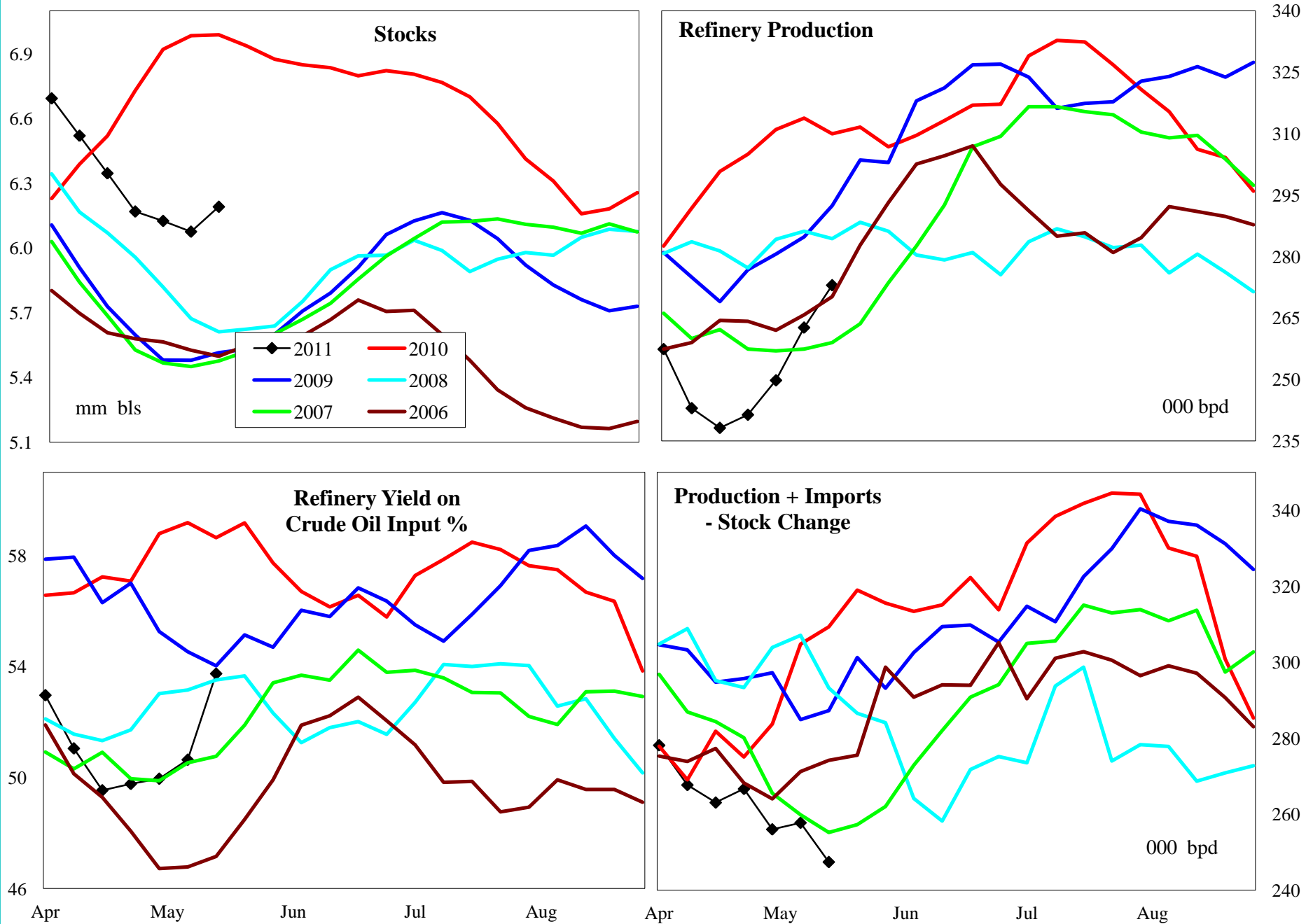
**-4.3**

Imports

**-67**

**-19.9**

# PADD 4 Gasoline Supply



**4 wk avg variance to prior year**

000 bpd (000 bls stks)

% change

Stocks

-797

-11.4

Production

-66

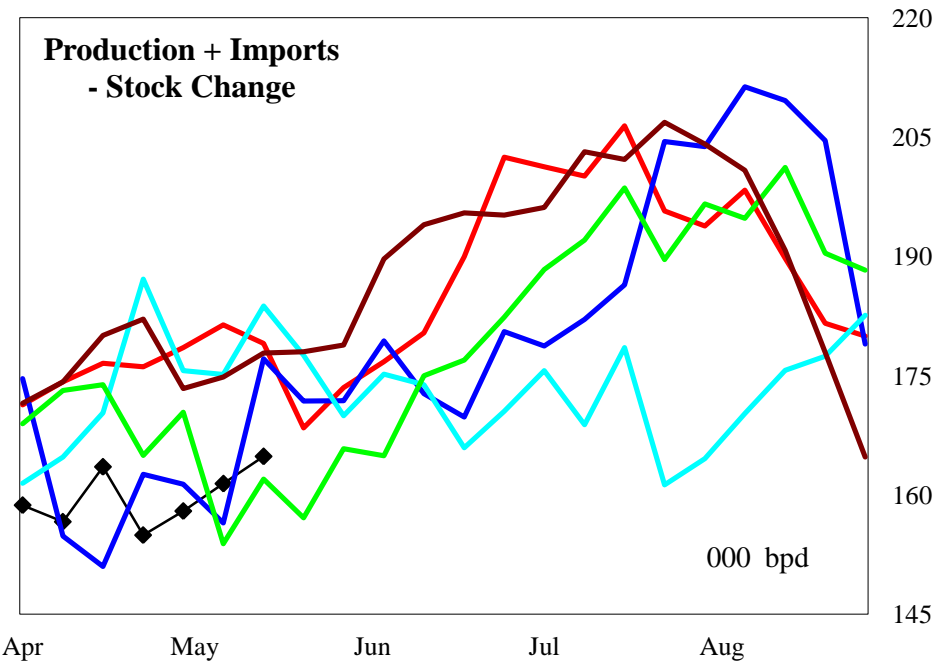
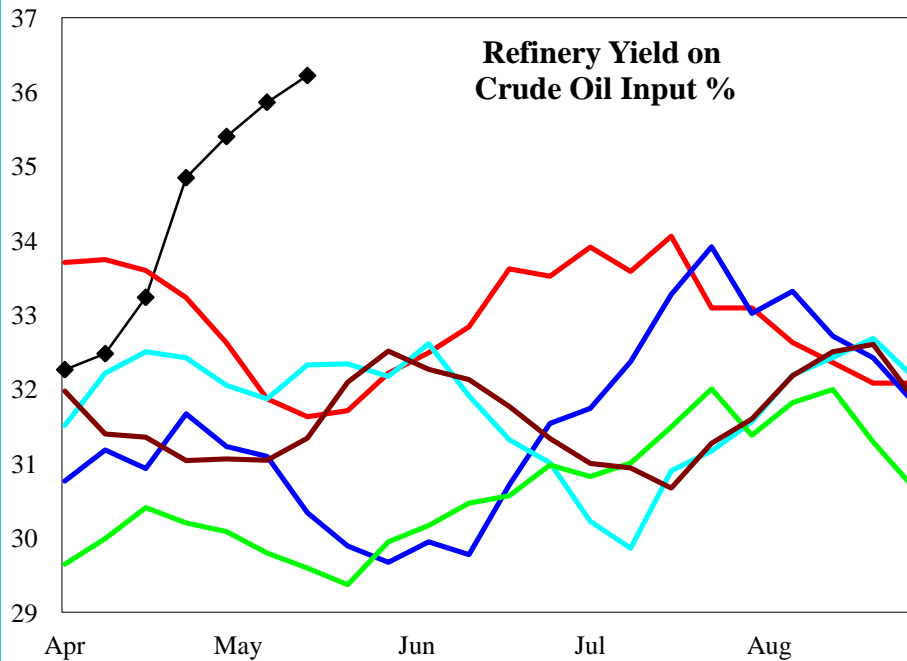
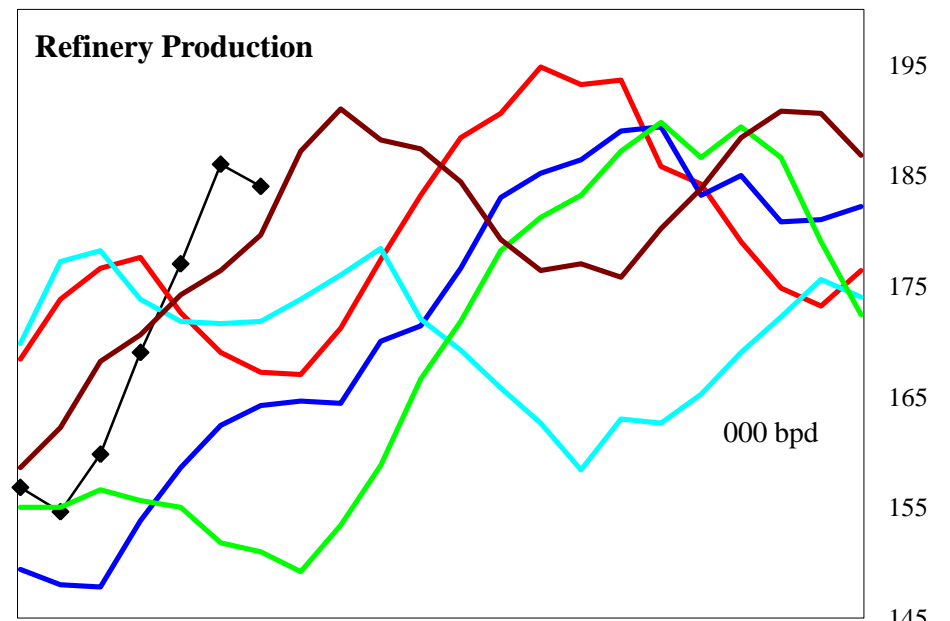
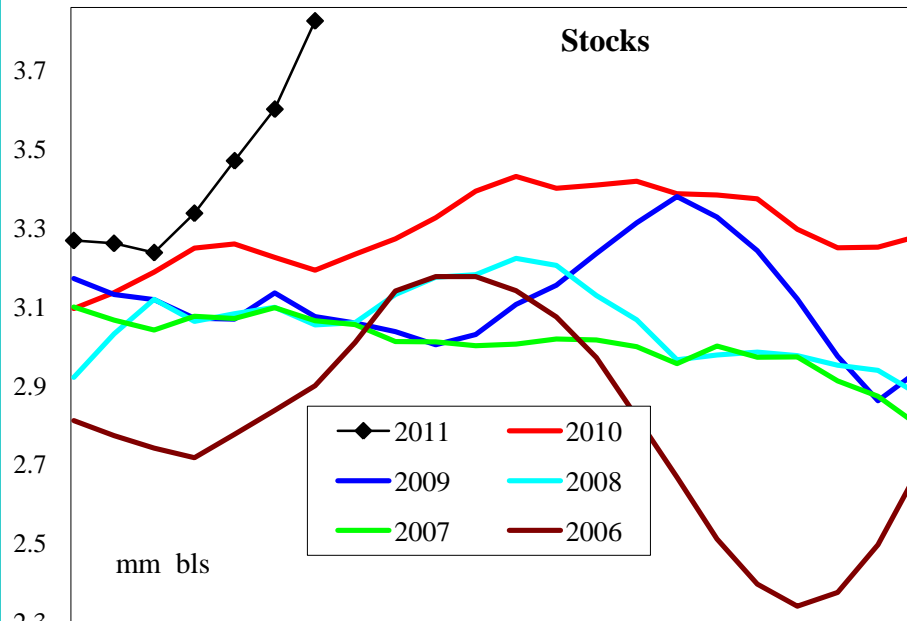
-20.6

Prod + Imp - Stk chg

-38

-12.8

# PADD 4 Distillate Supply



4 wk avg variance to prior year

000 bpd (000 bls stks)

% change

Stocks

Production

Imports

Prod + Imp - Stk chg

633

10

-8

-20

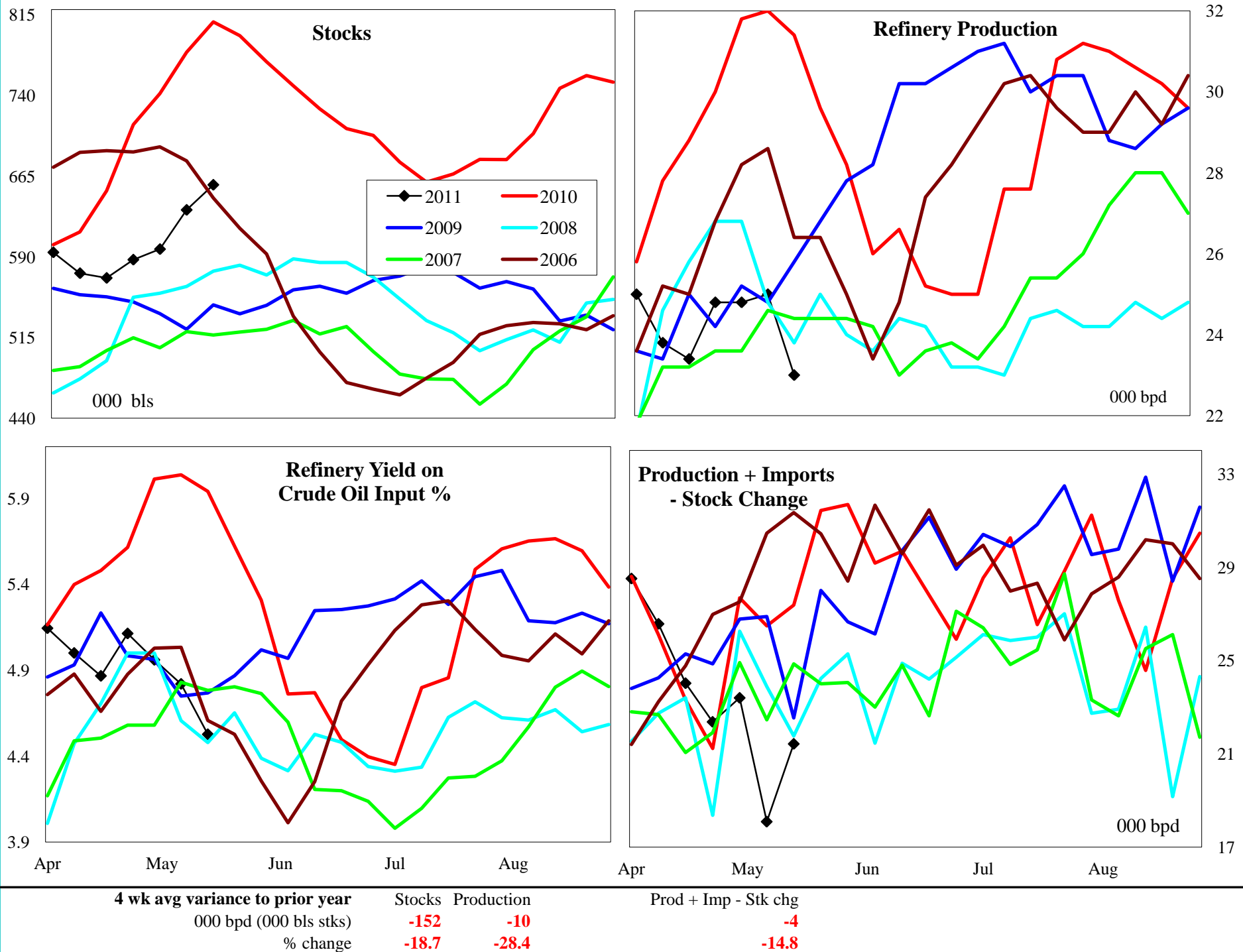
19.6

5.5

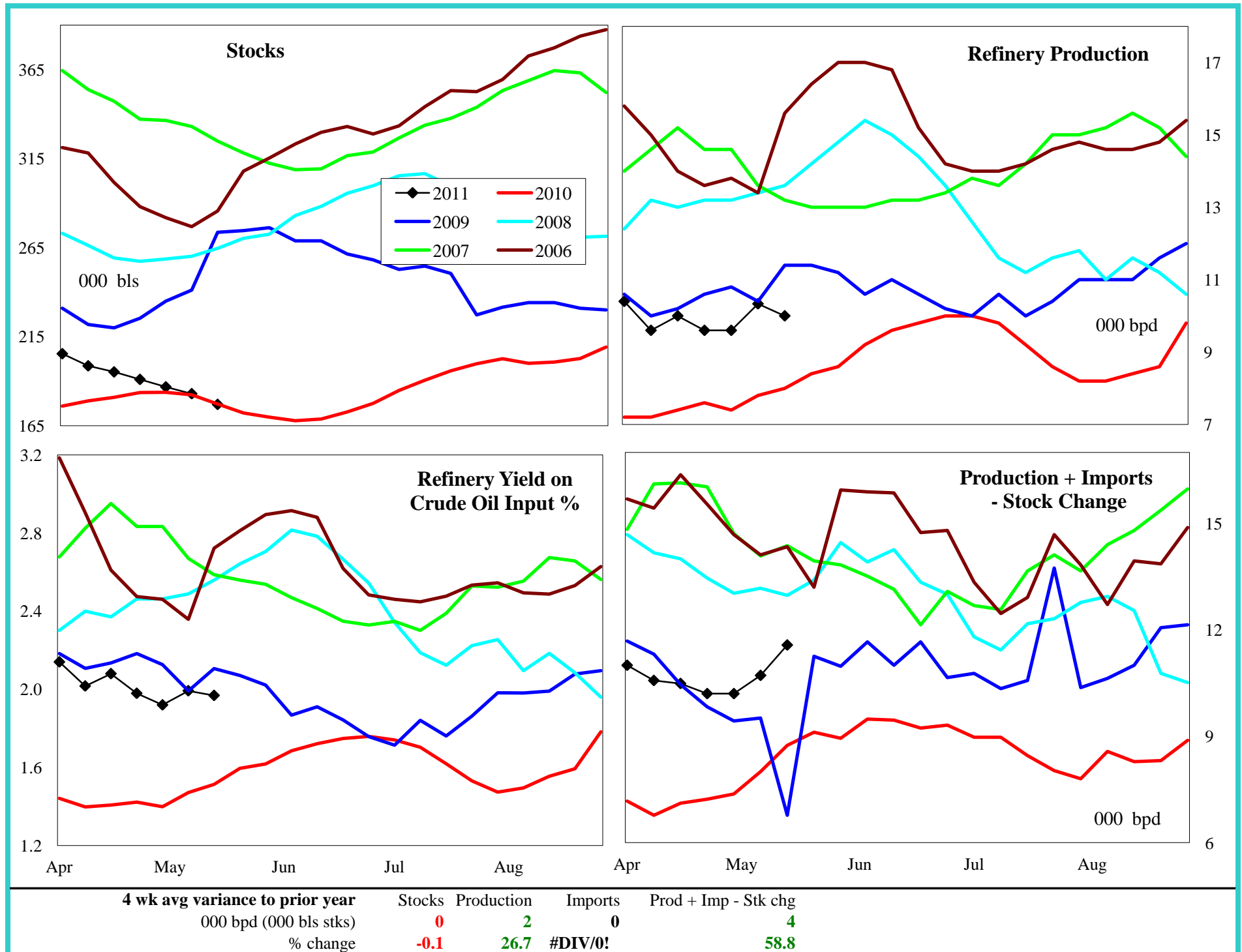
-100.0

-11.3

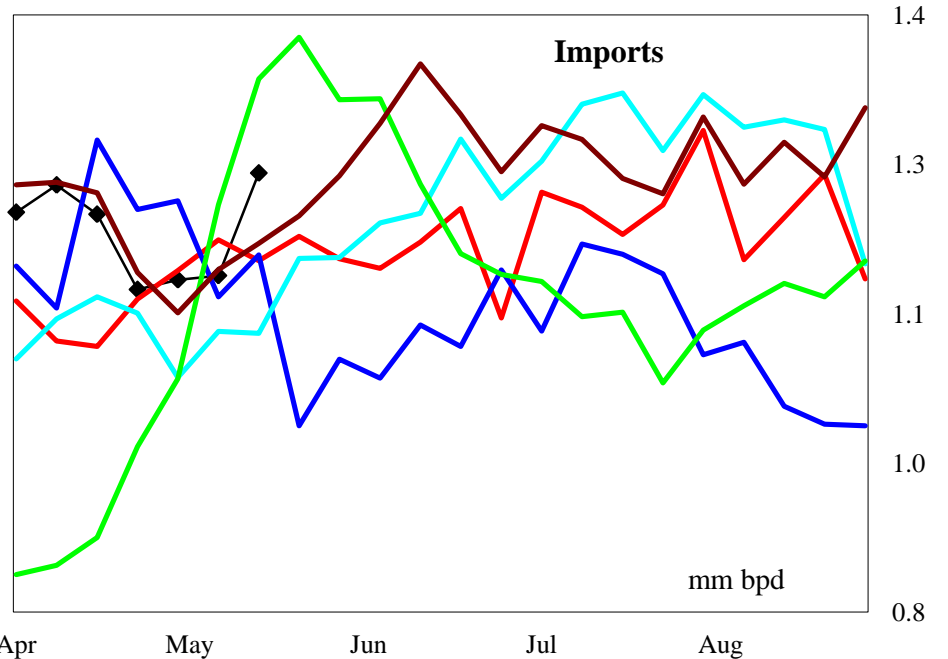
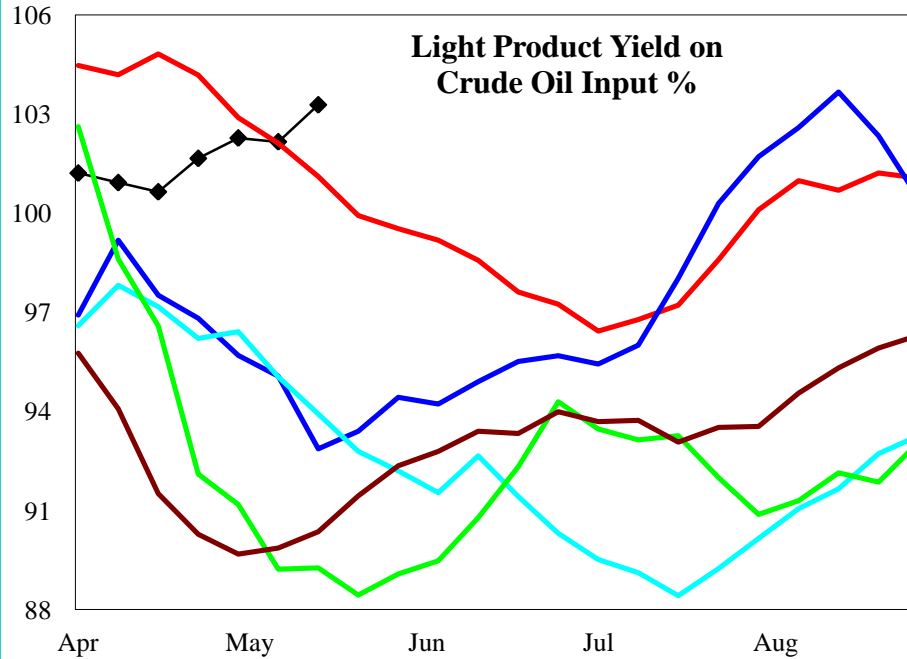
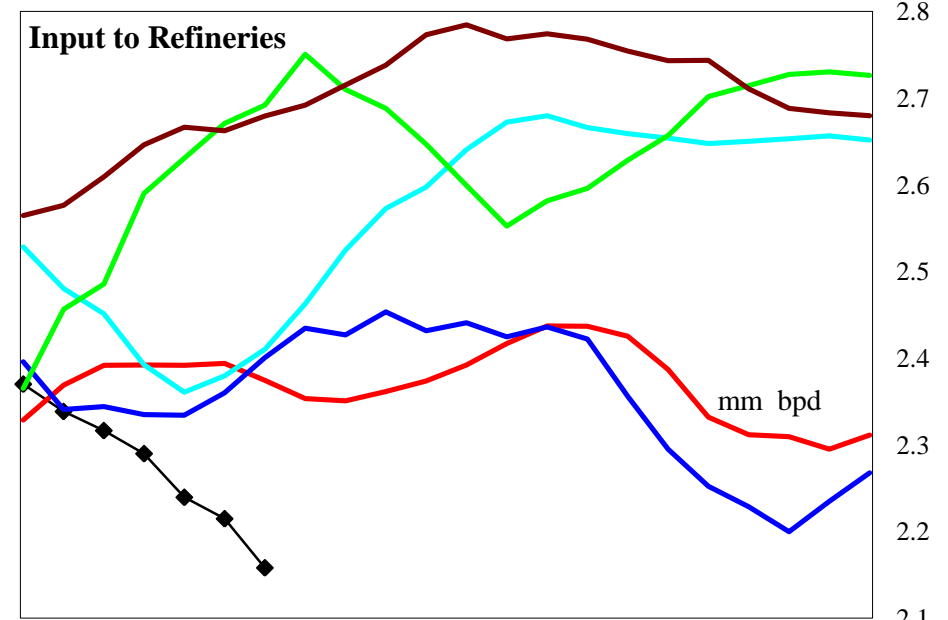
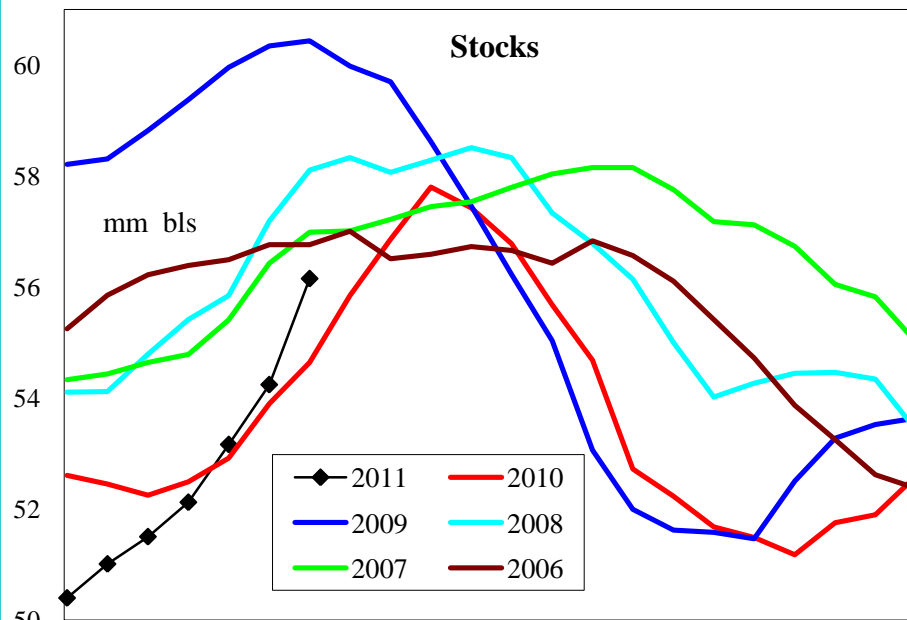
# PADD 4 Jet Fuel Supply



# PADD 4 Residual Fuel Oil Supply



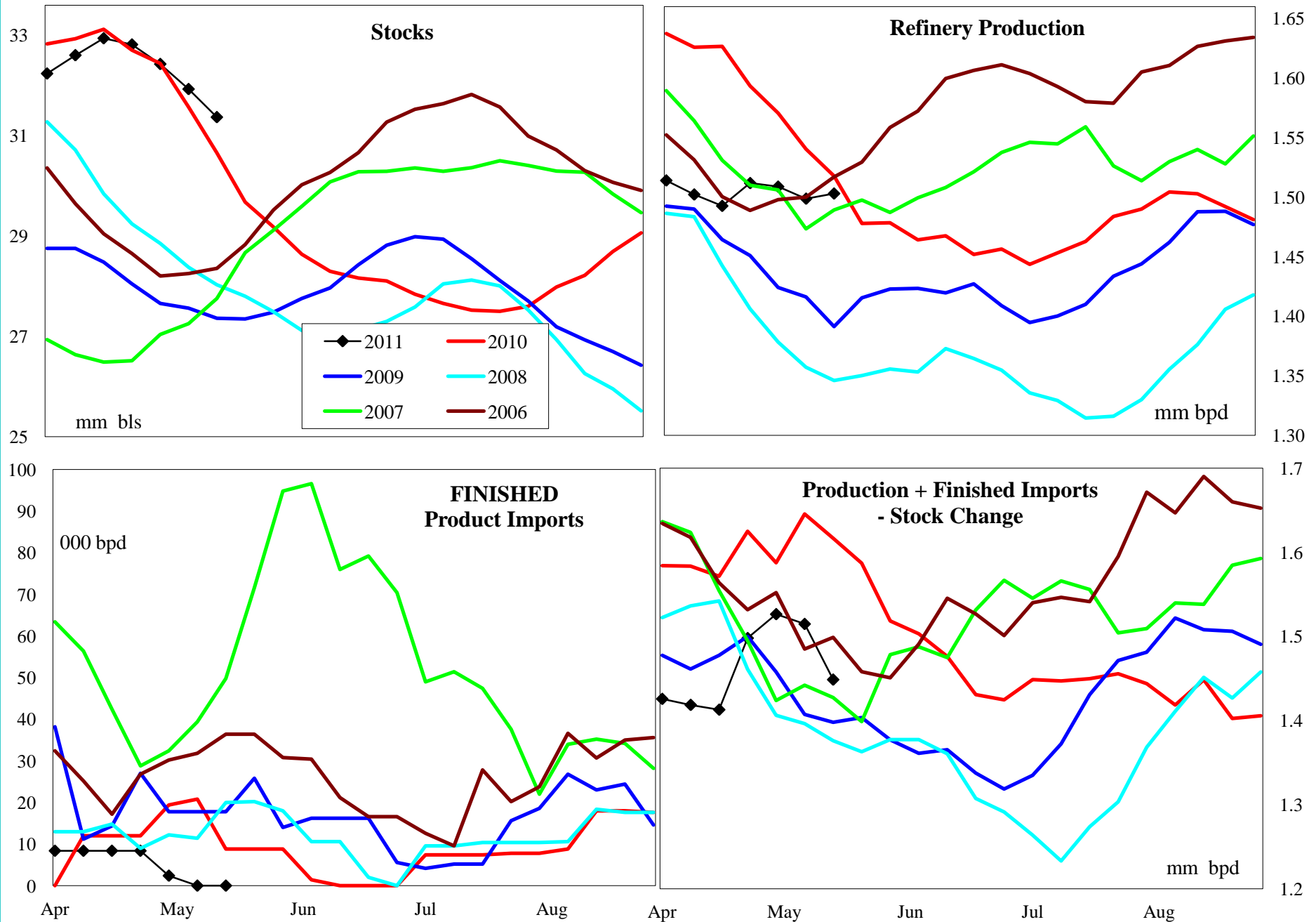
# PADD 5 Crude Oil Supply and Refining



**4 wk avg variance to prior year**  
 000 bpd (000 bls stks)  
 % change

	Stocks	Input	Imports
000 bpd (000 bls stks)	1,513	-197	9
% change	2.8	-8.1	0.8

# PADD 5 Gasoline Supply



4 wk avg variance to prior year

000 bpd (000 bls stks)

% change

Stocks

Production

Fin Impt

Blend Impt

Prod + Imp - Stk chg

330

-57

-24

-34

-95

1.0

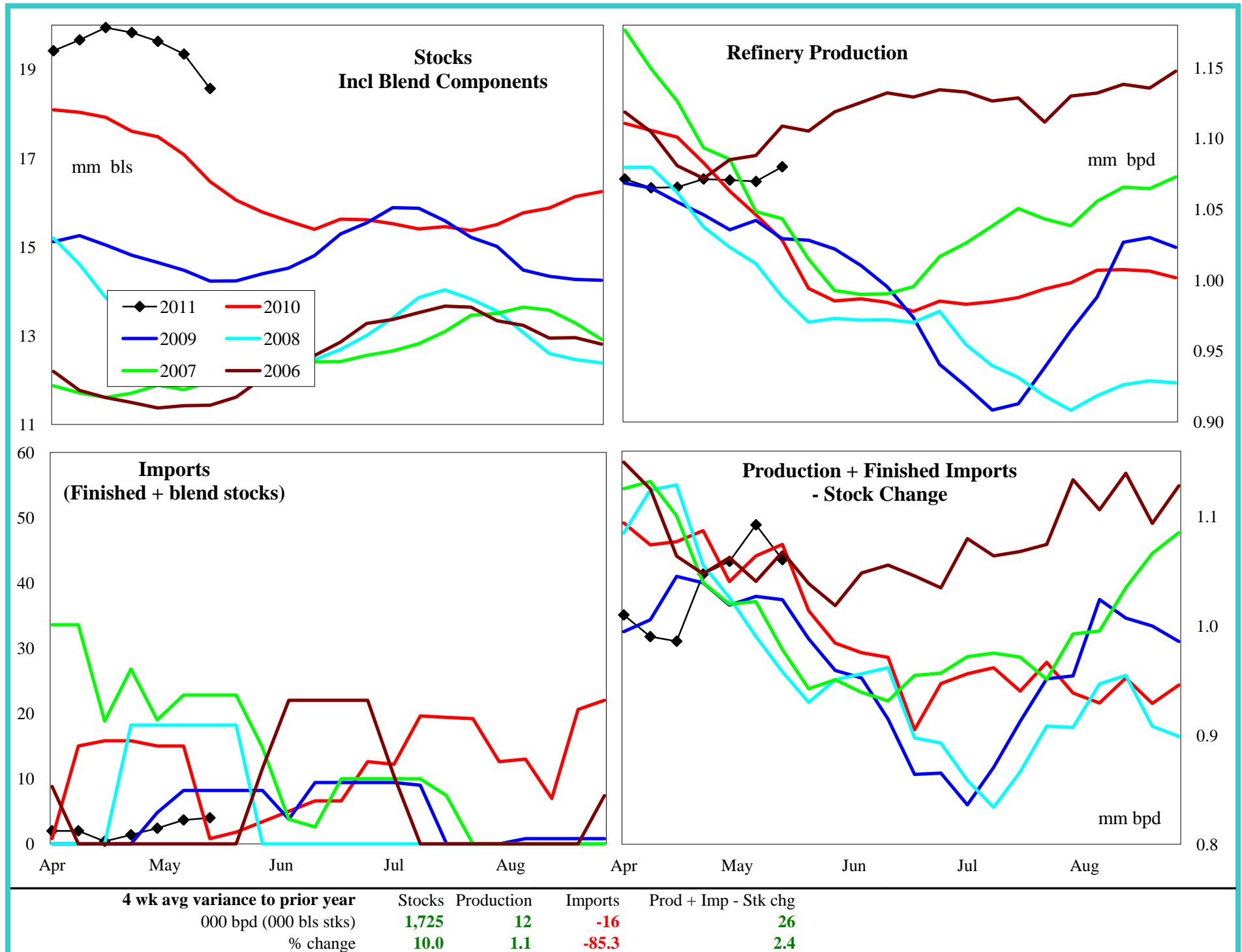
-3.6

-100.0

-73.3

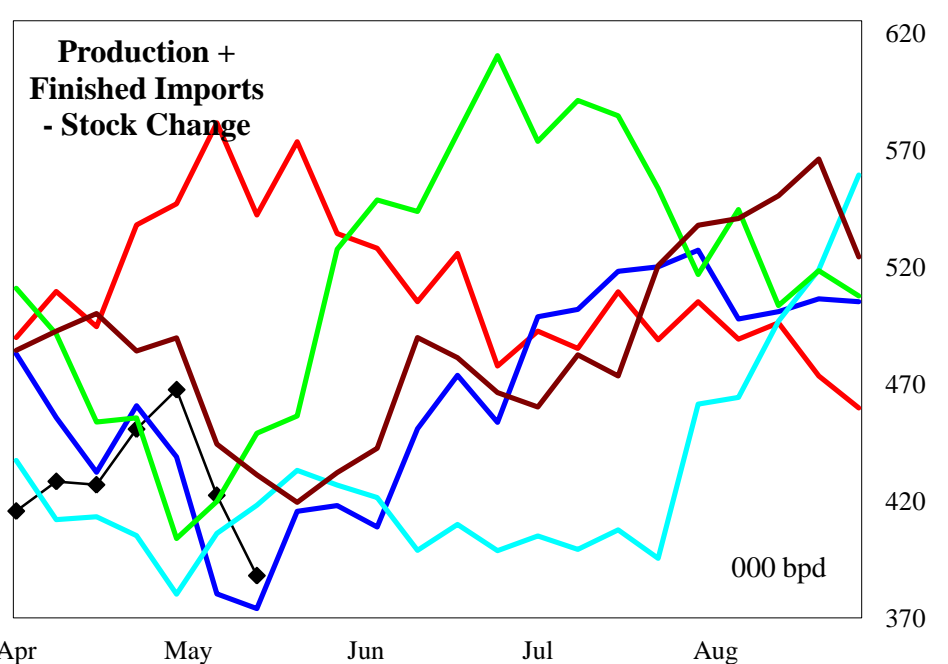
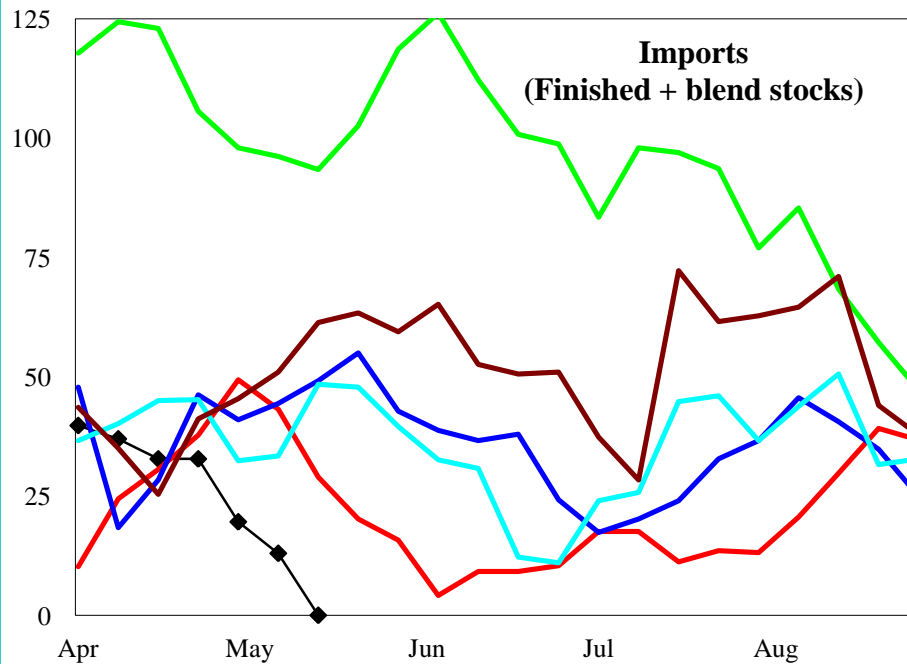
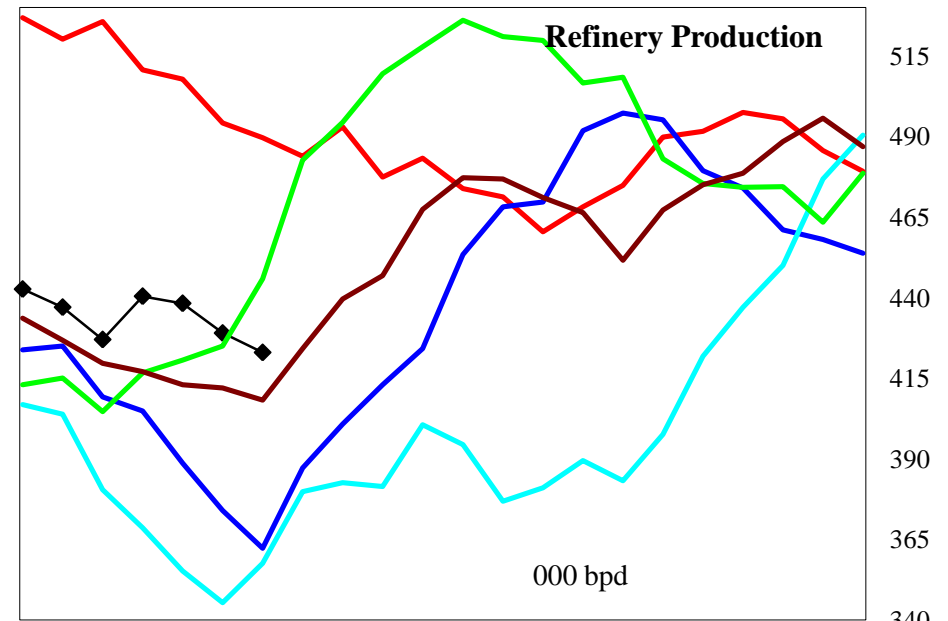
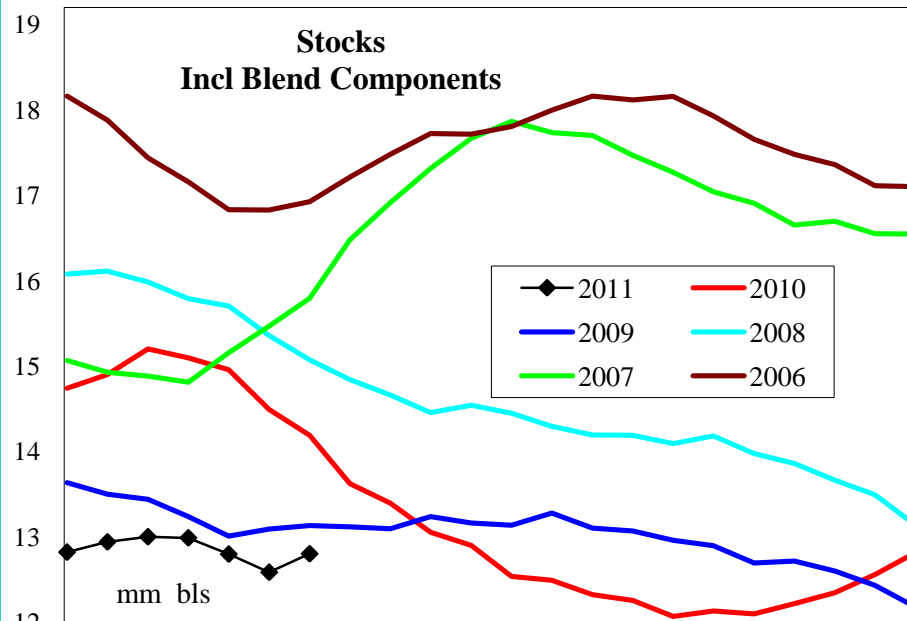
-5.6

# PADD 5 Reformulated Gasoline Supply





# PADD 5 Conventional Gasoline Supply



**4 wk avg variance to prior year**

000 bpd (000 bls stks)

% change

Stocks

Production

Imports

Prod + Imp - Stk chg

**-1,395**

**-68**

**-43**

**-121**

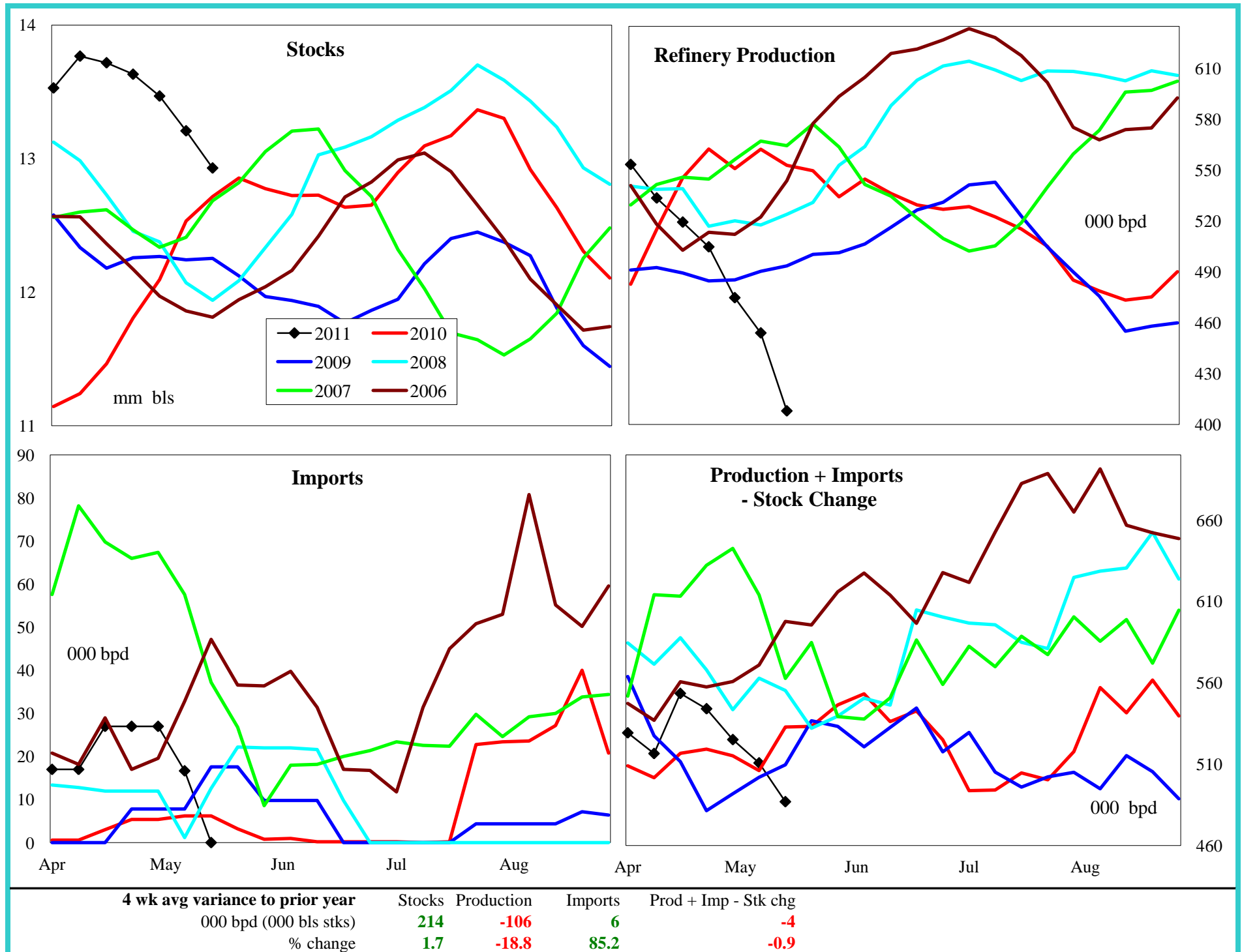
**-9.8**

**-13.6**

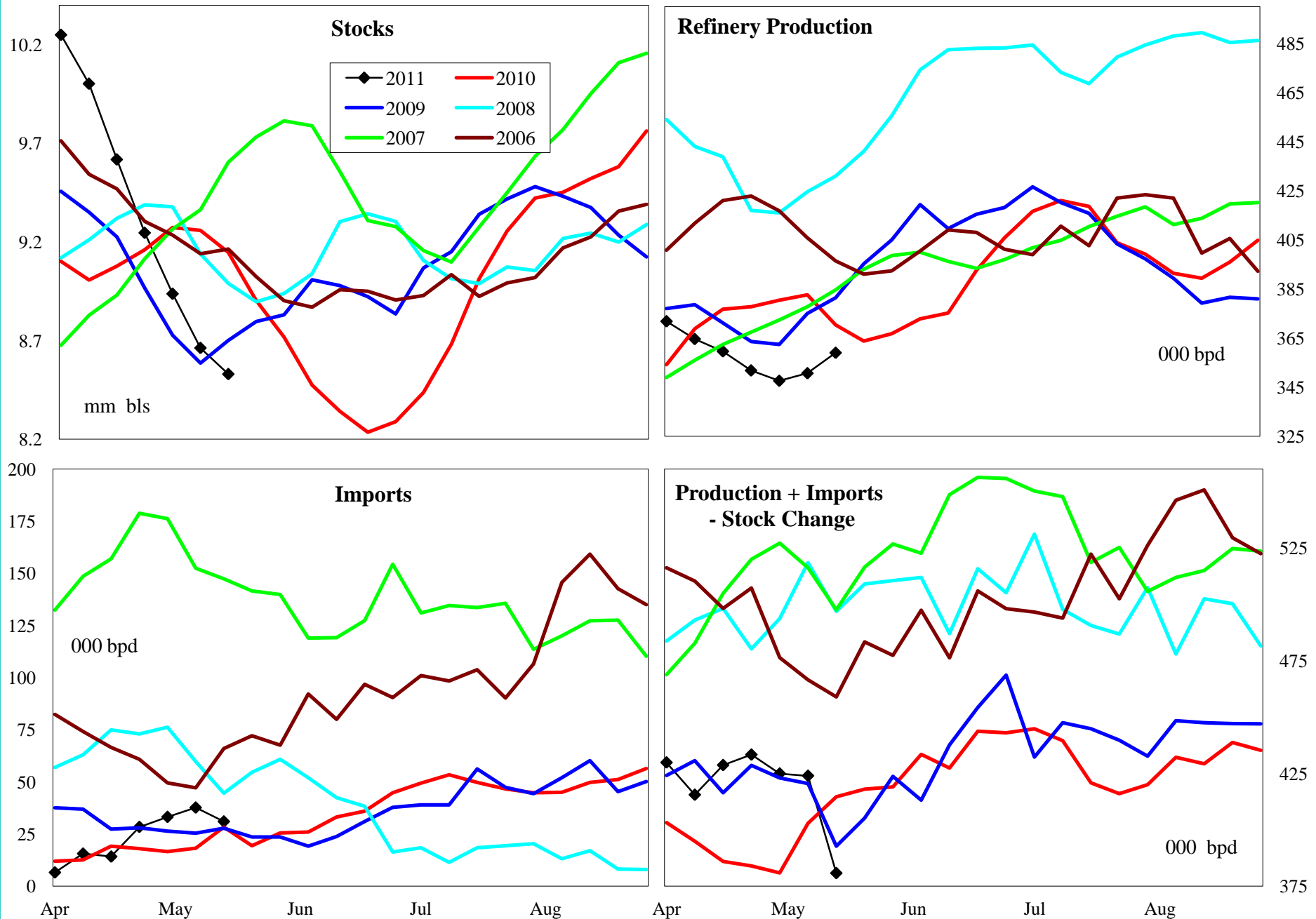
**-81.3**

**-20.8**

# PADD 5 Distillate Supply



# PADD 5 Jet Fuel Supply



**4 wk avg variance to prior year**

000 bpd (000 bls stks)

% change

Stocks

-728

-7.9

Production

-37

-9.6

Imports

22

114.7

Prod + Imp - Stk chg

32

8.4

# PADD 5 Residual Fuel Oil Supply

