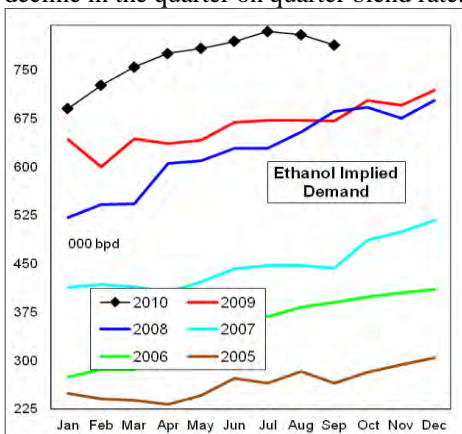


## ETHANOL SUPPLY-DEMAND TRENDS

### A Fundamental Petroleum Trends Monthly Report

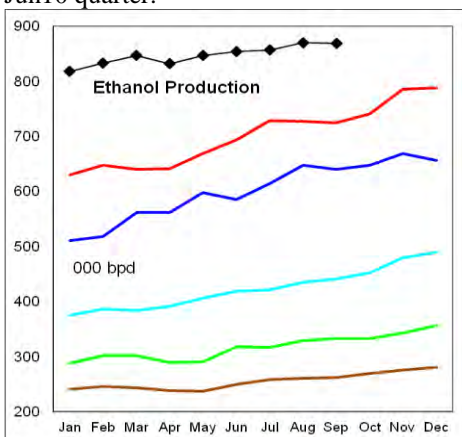
 Lehi German Tel: 816.505.0980 [www.fundamentalpetroleumtrends.com](http://www.fundamentalpetroleumtrends.com) Tuesday, December 07, 2010


**Summary:** Ethanol demand was 801,000 bpd in the Jul10 - Sep10 quarter, up +21,000 bpd compared to the Apr10 - Jun10 period. Wholesale gasoline demand increased +86,000 bpd in the same quarter over quarter period. These trends point to a decline in the quarter on quarter blend rate.



Year-over-year demand for ethanol between Jul10 - Sep10 and the same quarter in 2009 increased +129,000 bpd. This represented a +16% increase.

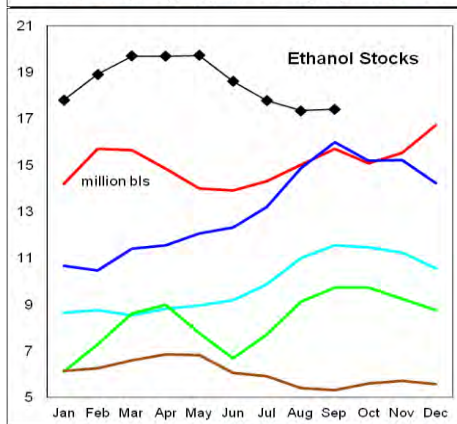
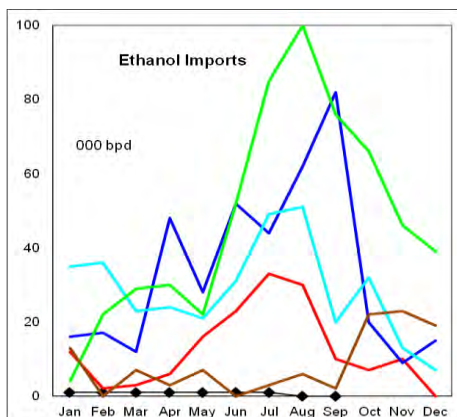
Ethanol production was 865,000 bpd during the Jul10 - Sep10 quarter, up +21,000 bpd compared to the Apr10 - Jun10 quarter.



Year-over-year production increased in the Jul10 - Sep10 quarter by +139,000 bpd. This was a +19% increase.

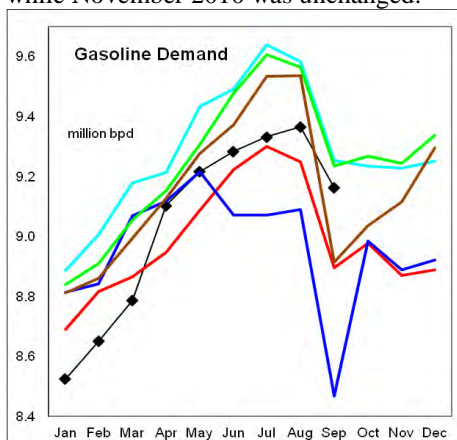
Imports averaged less than 1,000 bpd during the Jul10 - Sep10 quarter, unchanged from the 1,000 bpd during the Apr10 - Jun10 quarter.

Ethanol stocks increased +0.1 million barrels at the end of September compared to the end of August. Stocks increased +0.2 million barrels in PADD 02 while seeing small declines in all other regions.



**Gasoline Demand Trends:** Wholesale gasoline demand increased +138,000 bpd year-over-year in the Jul10 - Sep10 period compared to a year ago, a +1.5% increase.

Gasoline demand in October 2010 decreased -0.5% compared to a year ago while November 2010 was unchanged.



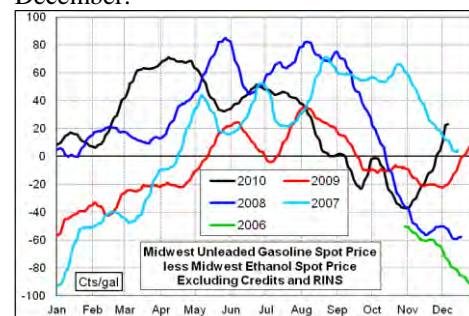
**Blending Trends:** During the Jul 10 - Sep10 quarter, 5.0 million bpd of conventional gasoline was blended with ethanol, equal to 80% of conventional grade output. This was an increase of +0.9 million bpd over the same period in 2009. The volume of gasoline not blended with ethanol was 1.2 million bpd in Sep 2010, 19% of total production.

**Ethanol Blend Economics:** Midwest ethanol prices increased +\$0.50/gal between 01Sep10 and early November; followed by a nearly equal decline to \$2.05/gal in the 1st week of December.

Midwest spot gasoline prices traded between \$1.95/gal and \$2.30/gal during the period September to early December.

The Midwest spot gasoline - ethanol price spread, made lows in early November of -\$0.40/gal. The spread then trended sharply higher during the month, ending at +\$0.20/gal in early December. The current spread in favor of gasoline of \$0.20/gal was a record high for the period during the last 4-years

Including tax and RINS credits of approximately \$0.50/gal, blending economics are at 4-year highs for early December.



**Emerging Trends:** Ethanol stocks fell -4 million barrels between 07Jul10 and 05Nov10; followed by a + 1.1 million barrel build during November. Concurrent with the ethanol stock build was emergence of a gasoline supply squeeze in the Central Atlantic Region of PADD 1; driven by above normal refinery maintenance on the eastern seaboard, Asian demand for naphtha from Europe and rebuilding of stocks in Europe following strikes in France.

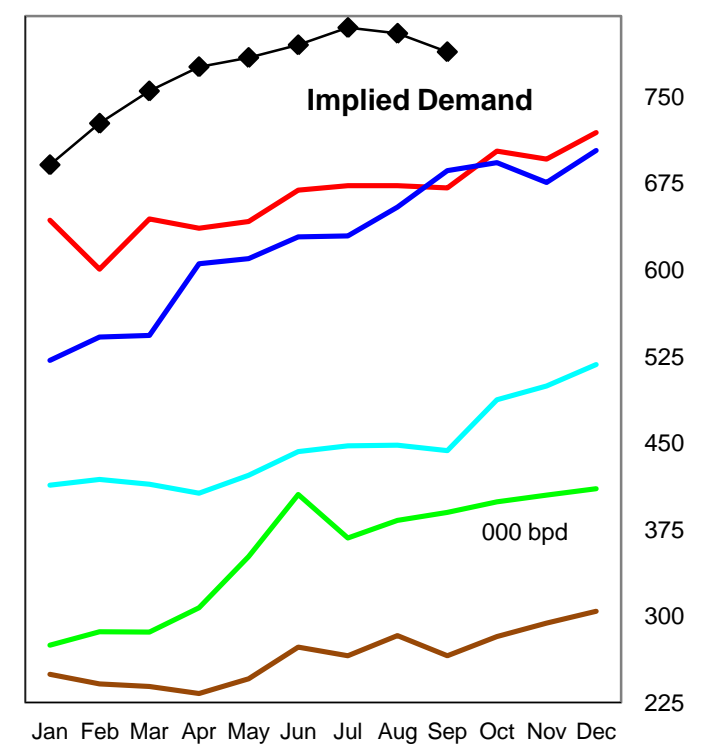
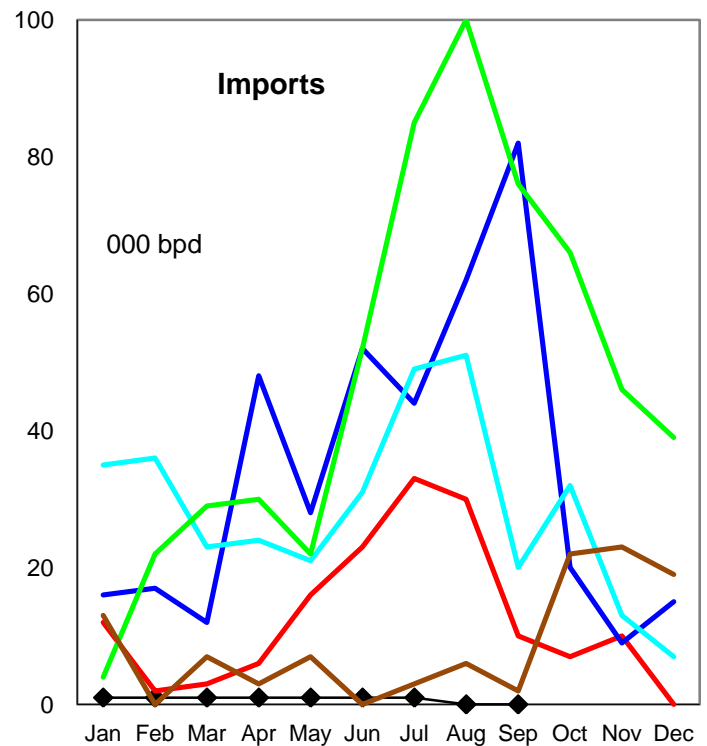
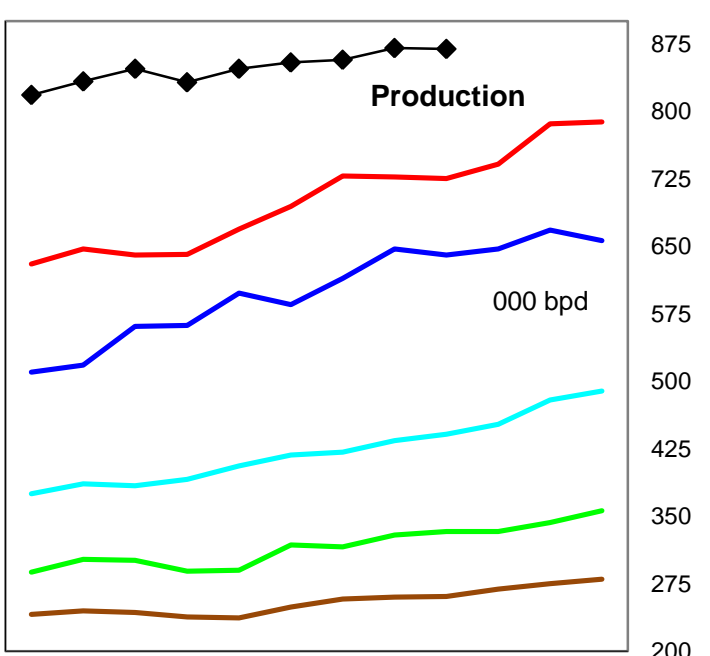
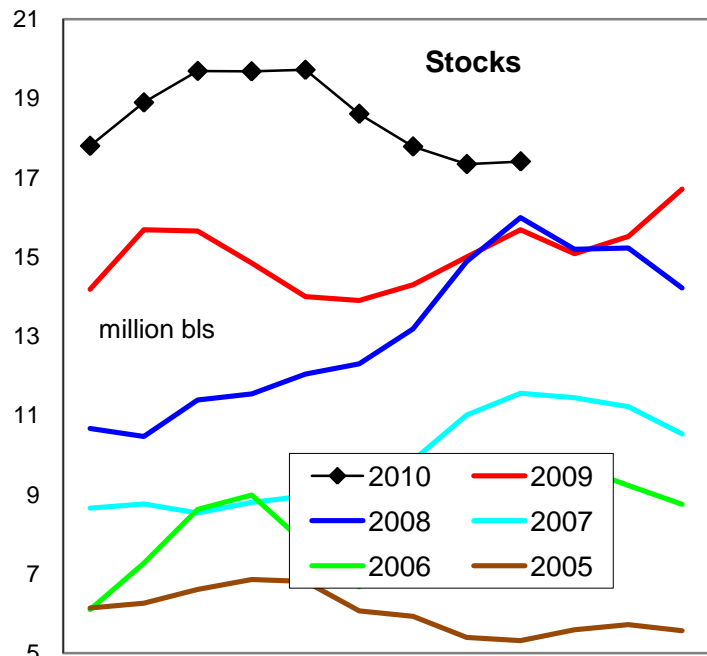
These fundamental trends led to a spike in the gasoline - ethanol price spread, which reached a 4-year high for the early December period.

As the East Coast gasoline market is resupplied, and FCCUs return to operation in the Chicago area, the Midwest gasoline to ethanol price spread is likely to trend lower over the next 60-days.

Note that ethanol production has been flat over the last 6-months, while demand declined in each of the past 2-months; confirming lackluster growth in the ethanol market.

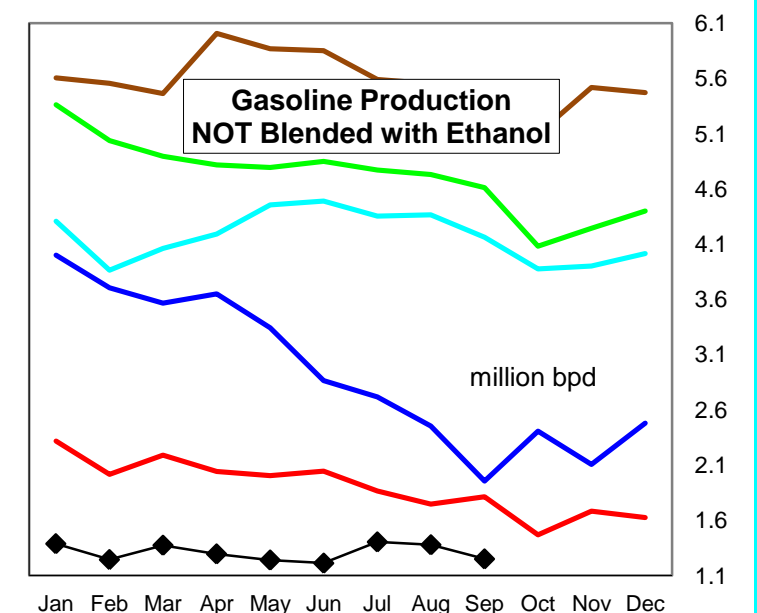
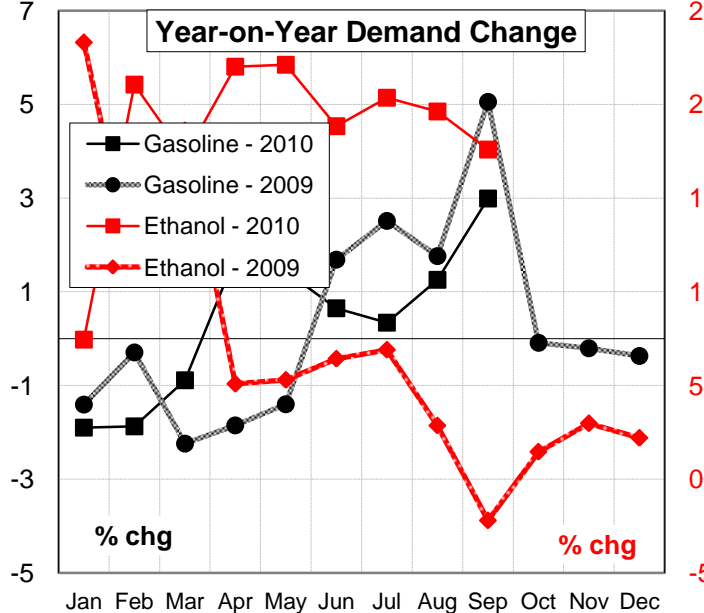
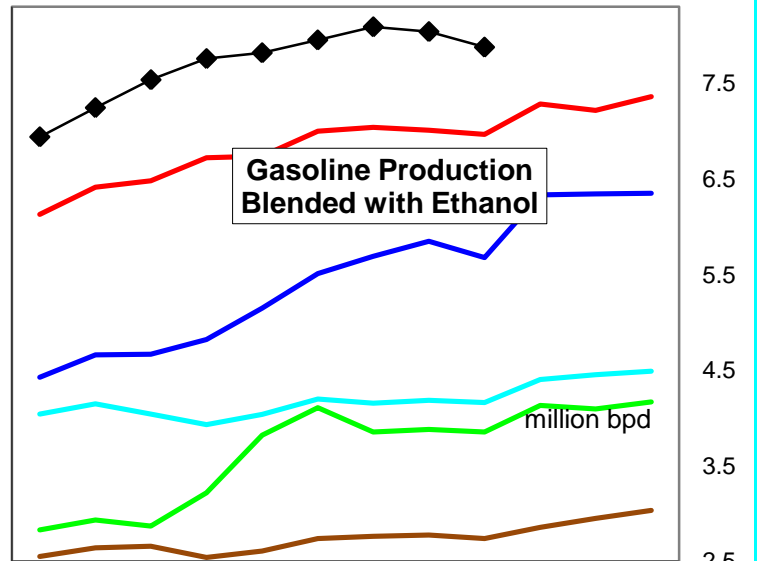
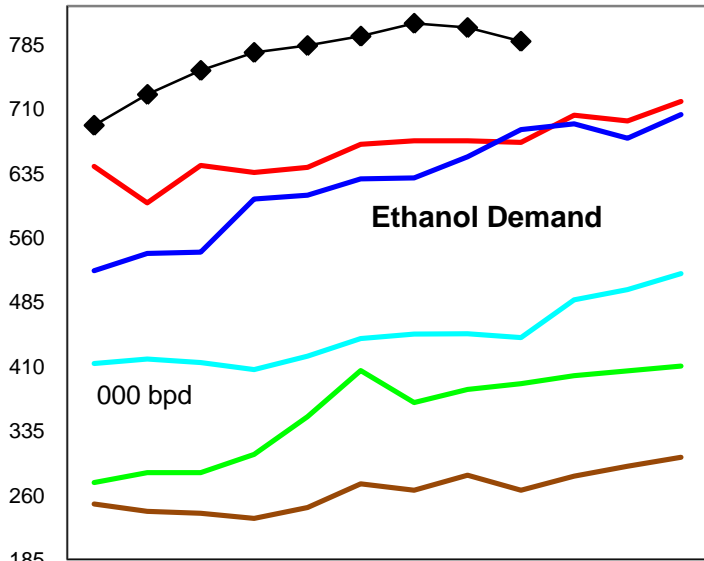
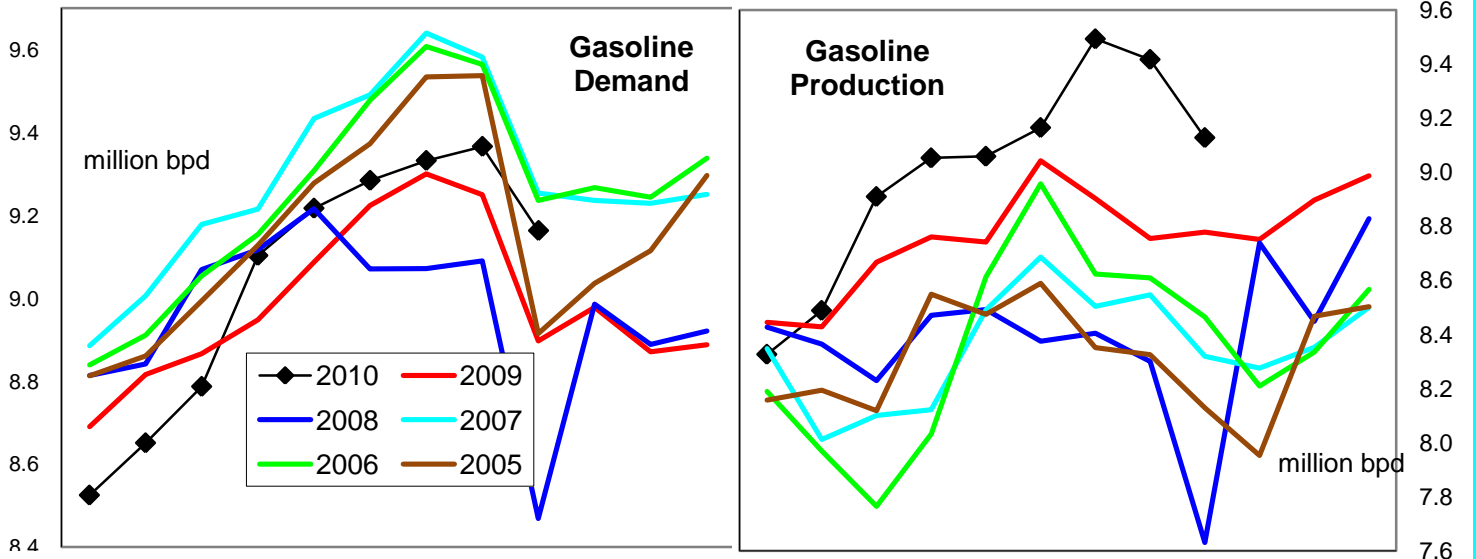
### United States Ethanol Supply-Demand Balance

Item	Monthly Ethanol Supply-Demand Balance						Change From Prior Year		
	Sep10	Aug10	Jul10	Jun10	May10	Apr10	1-Month	3-Mth Avg	6-Mth Avg
Production	869	870	857	854	847	832	144	139	158
Imports	0	0	1	1	1	1	-10	-24	-19
EIA Adjustment	-77	-79	-74	-98	-63	-58	-35	-17	-18
Demand	789	805	810	795	784	776	118	129	133
Ending Stocks	17,408	17,340	17,784	18,610	19,721	19,682	1,720	2,516	3,803
Change in stocks	68	-444	-826	-1,111	39	-9			
Wholesale Gasoline Demand	9,163	9,366	9,332	9,284	9,217	9,103	266	138	127
Conv Ethanol Gasoline Blend	4,911	4,995	5,057	4,939	4,786	4,660	883	937	968
Ethanol % of Total Gasoline	9.42	9.40	9.50	9.37	9.30	9.32	1.26	1.51	1.57



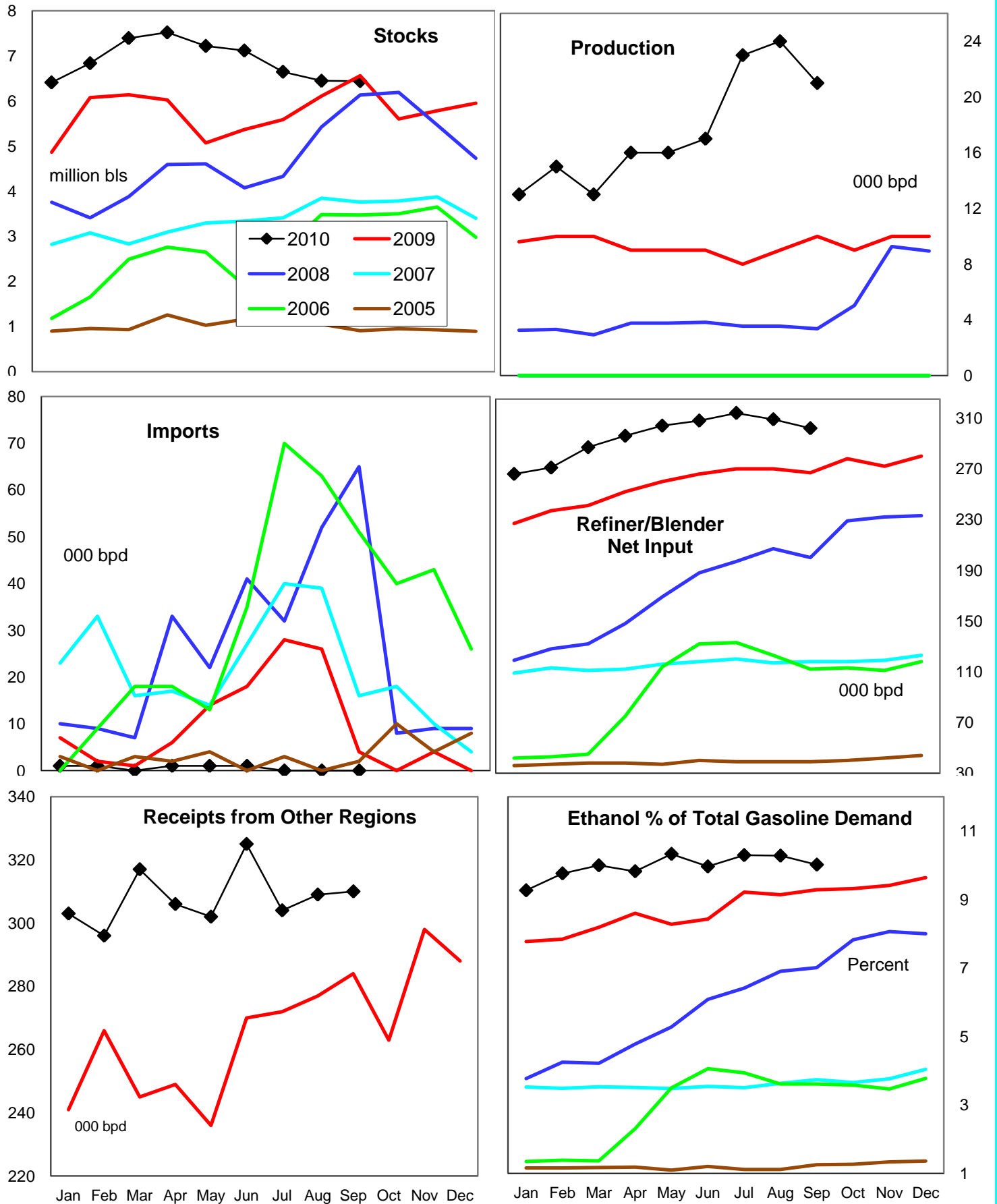
Variance to prior year	Stocks	Production	Imports	Demand
000 bpd (000 bbls stocks)	1,720	144	-10	118
% change	11.0	19.9	-100.0	17.6

### U. S. Gasoline/Ethanol Demand and Blending



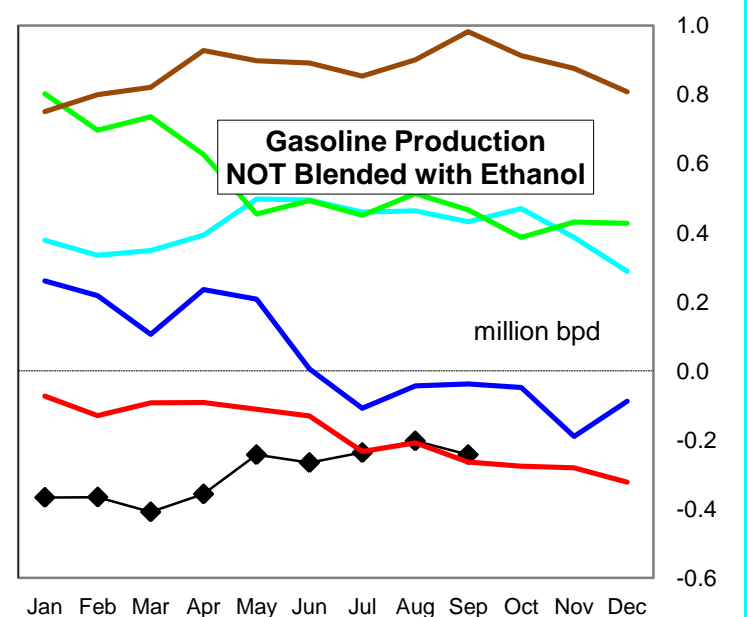
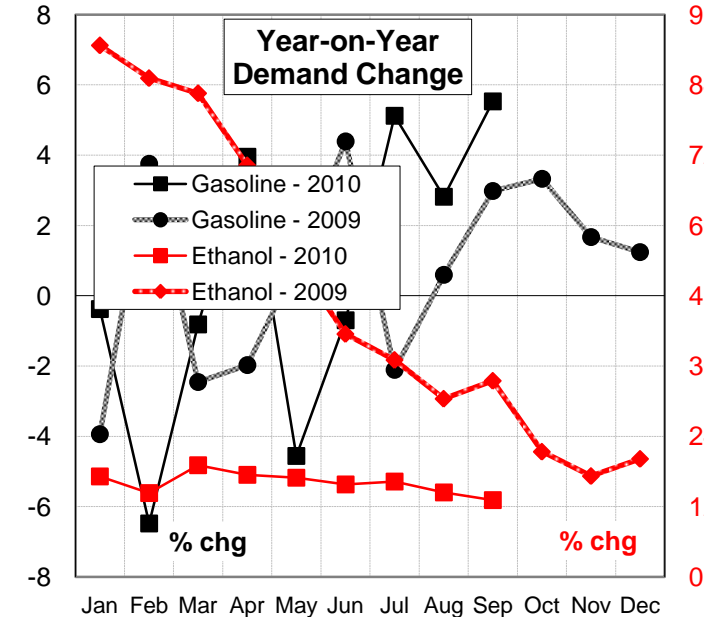
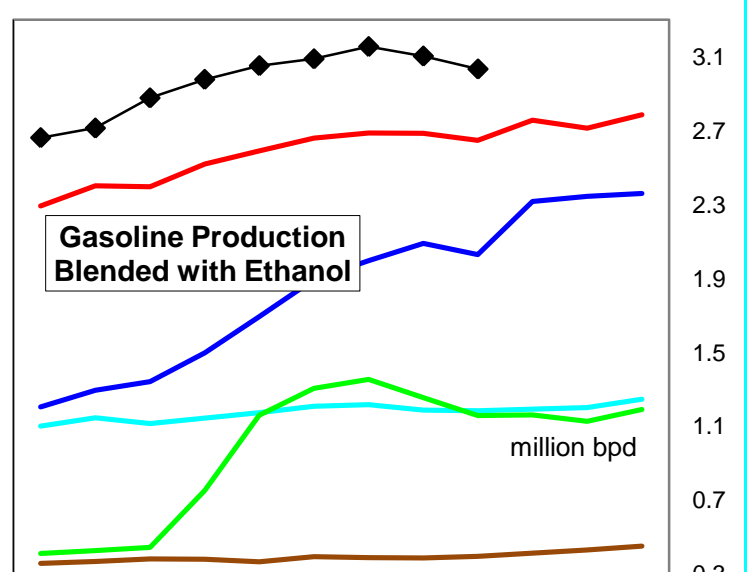
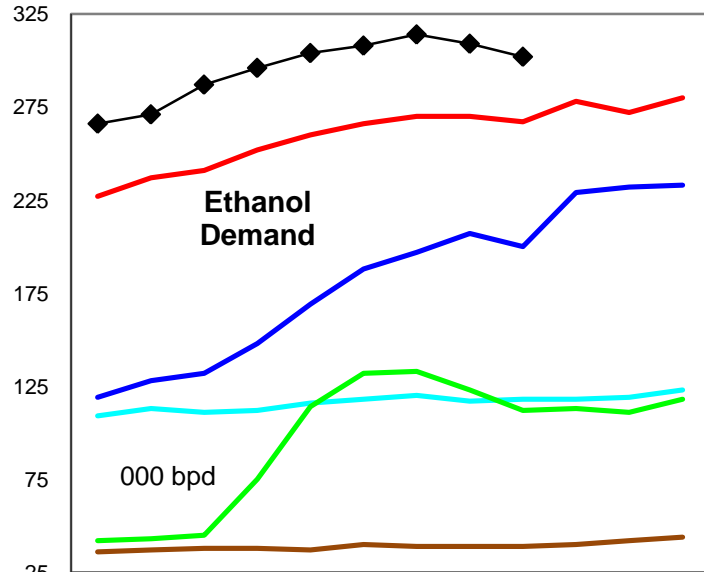
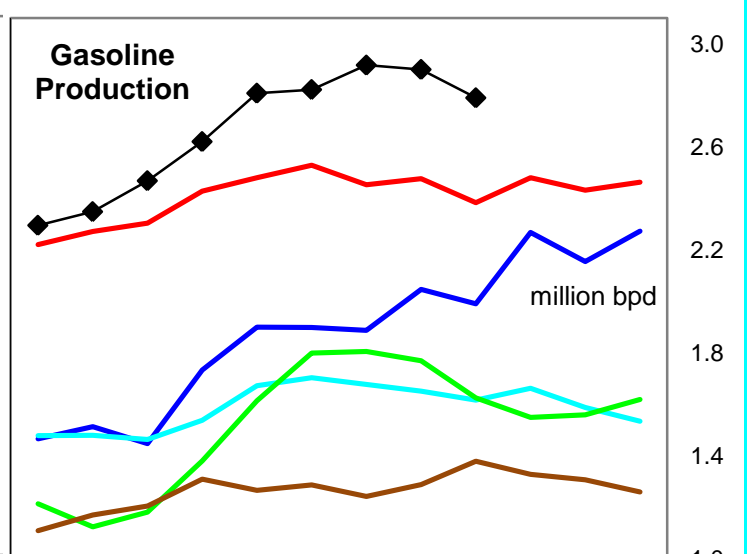
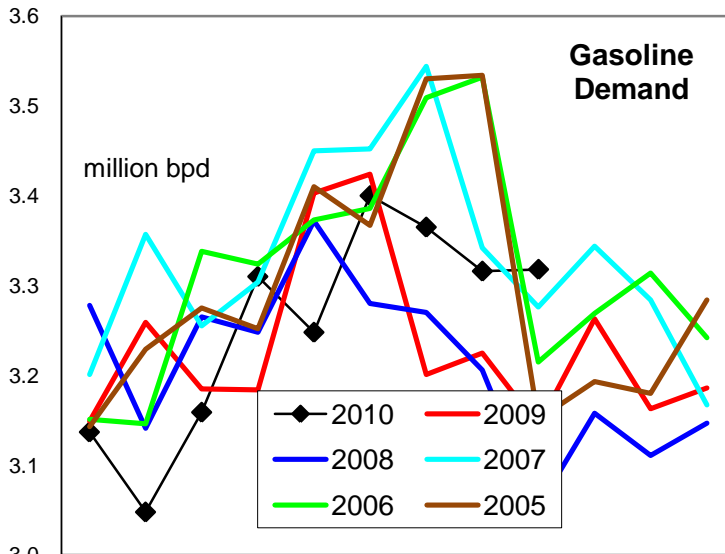
Variance to prior year	Gasoline Demand	Ethanol Demand	Prod with Ethanol	Prod Excl Ethanol
000 bpd	266	118	911	-562
% change	3.0	17.6	13.1	-31.0

### PADD 1 Ethanol Supply-Demand Balance



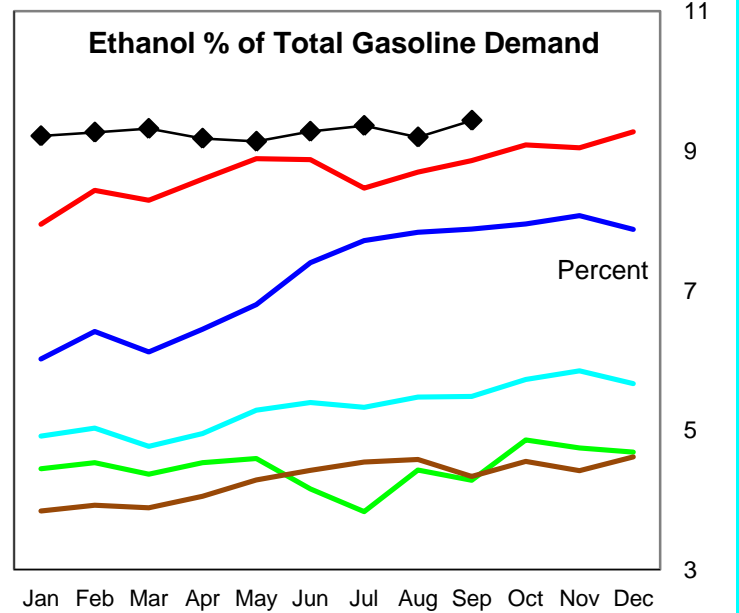
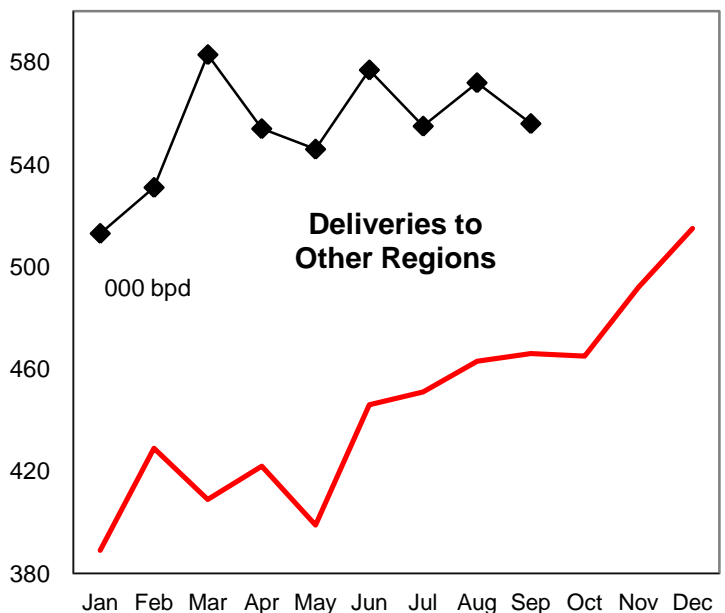
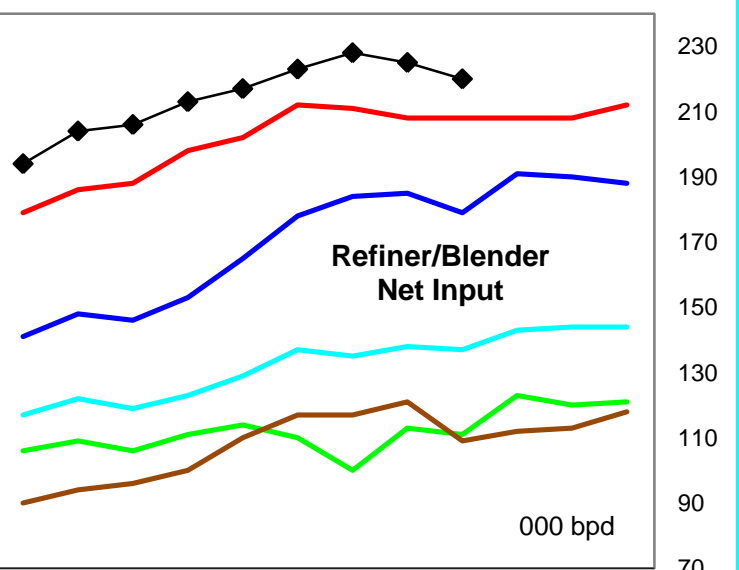
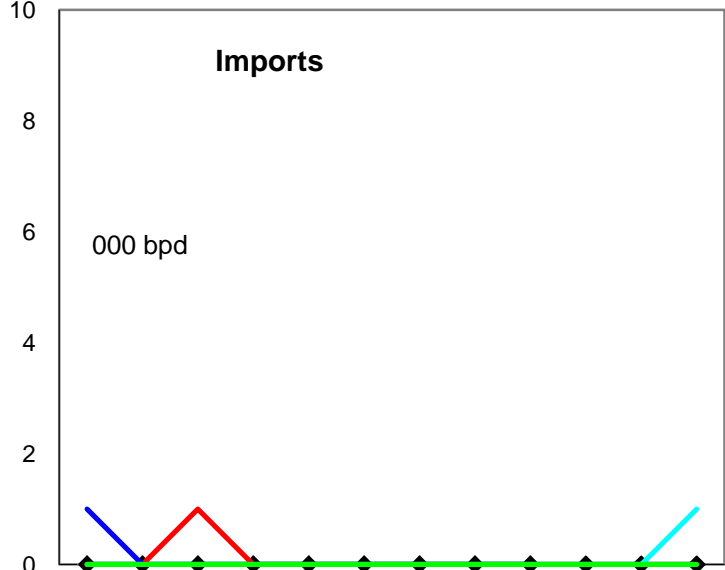
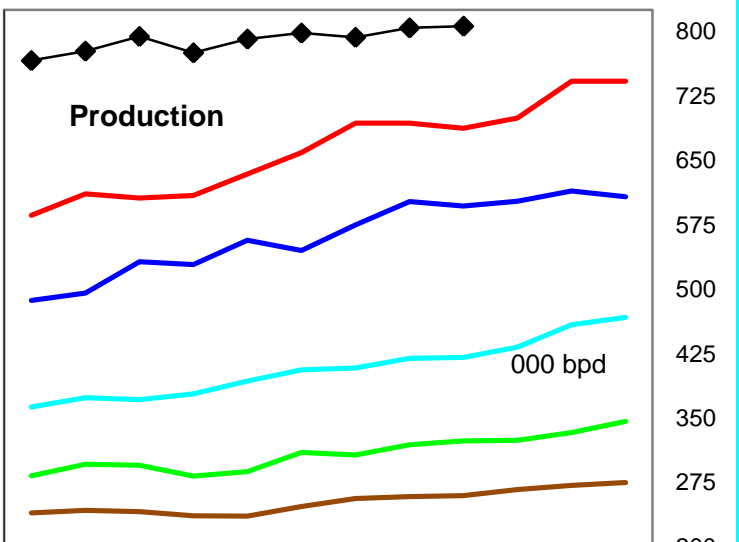
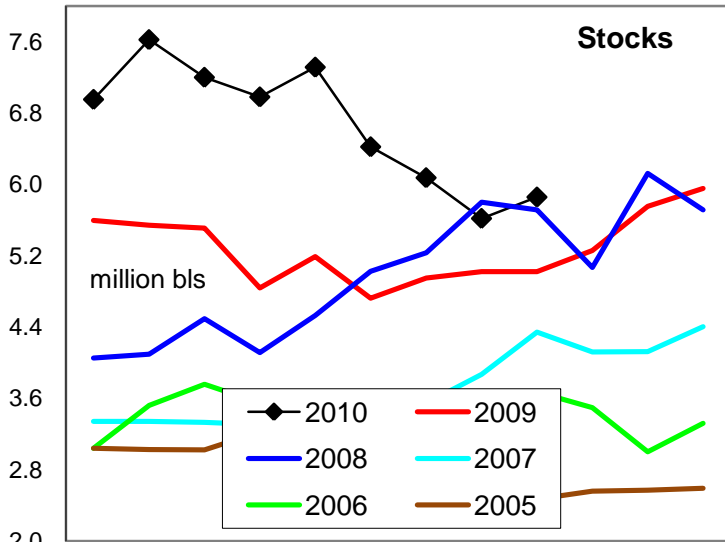
Variance to prior year	Stocks	Production	Imports	Demand
000 bpd (000 bls stocks)	-117	11	-4	35
% change	-1.8	110.0	-100.0	13.1

# PADD 01 Gasoline/Ethanol Demand and Blending



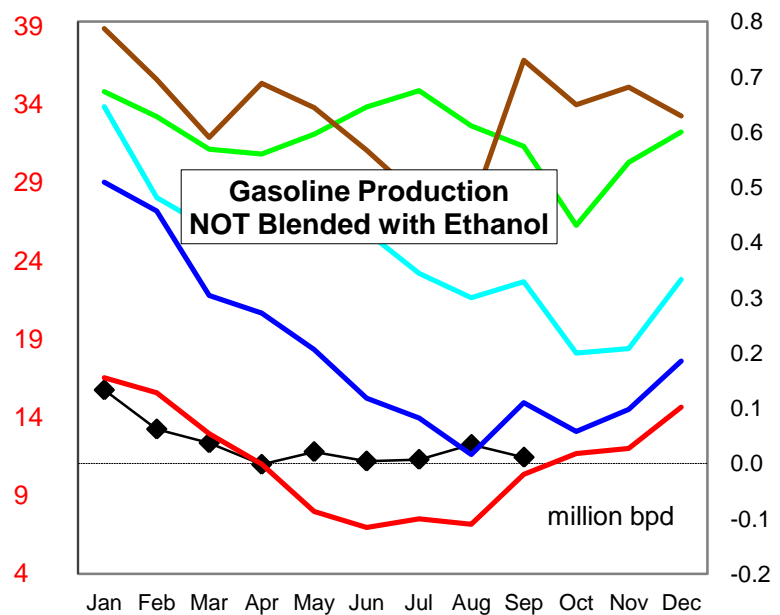
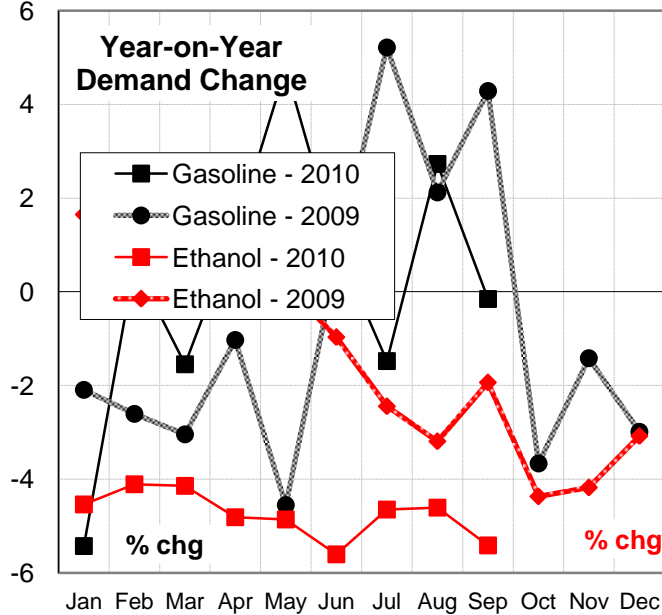
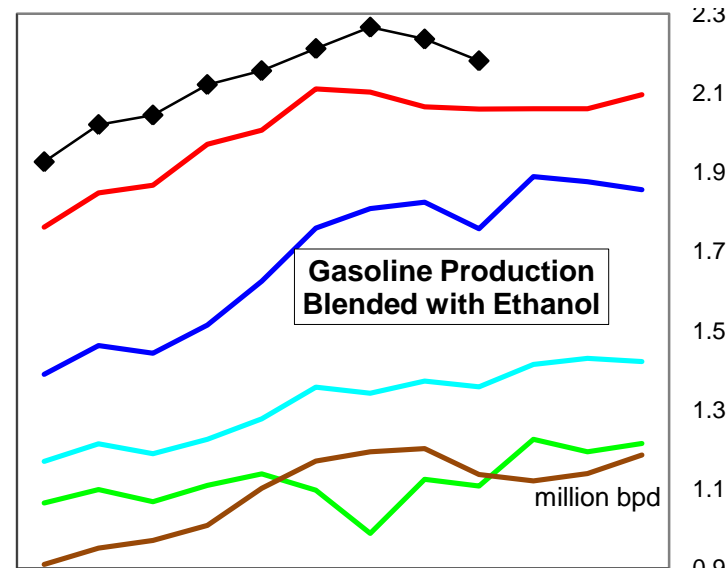
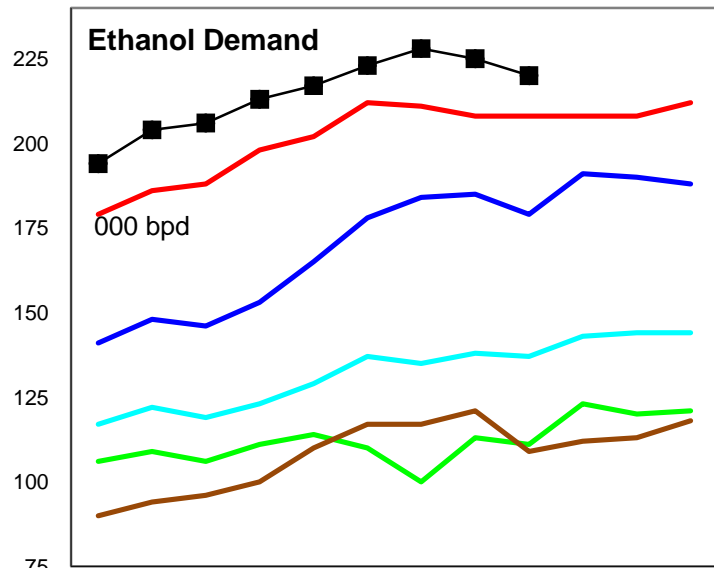
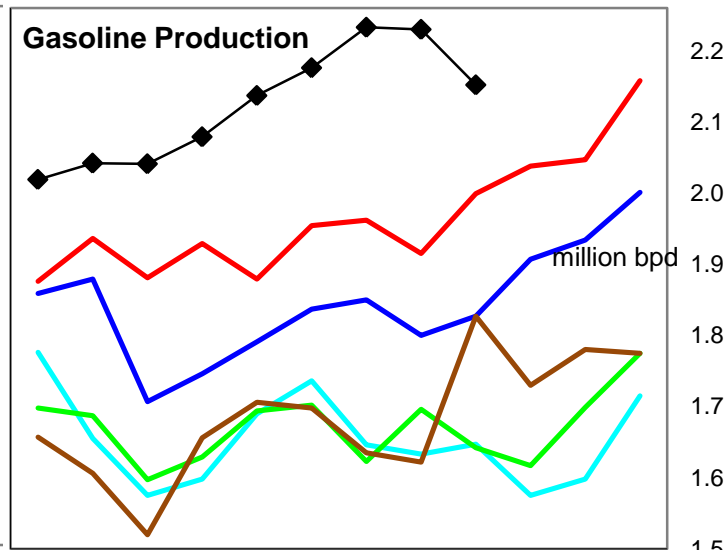
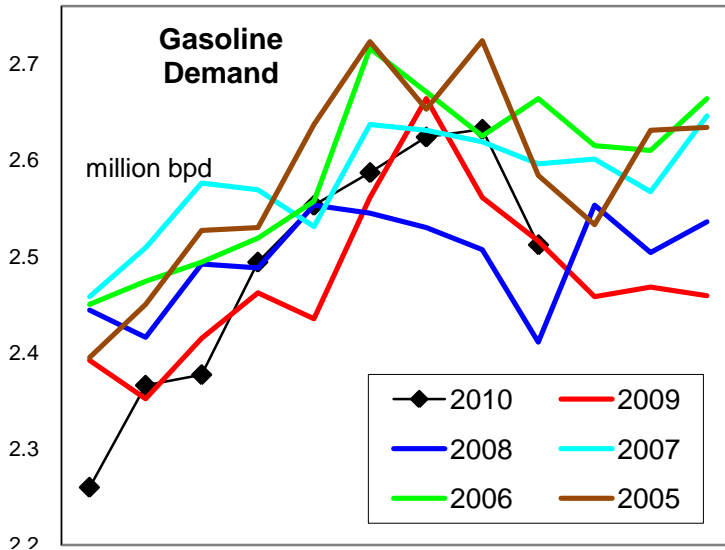
Variance to prior year	Gasoline Demand	Ethanol Demand	Prod with Ethanol	Prod Excl Ethanol
000 bpd	174	35	386	21
% change	5.5	13.1	14.6	-8.0

### PADD 2 Ethanol Supply-Demand Balance



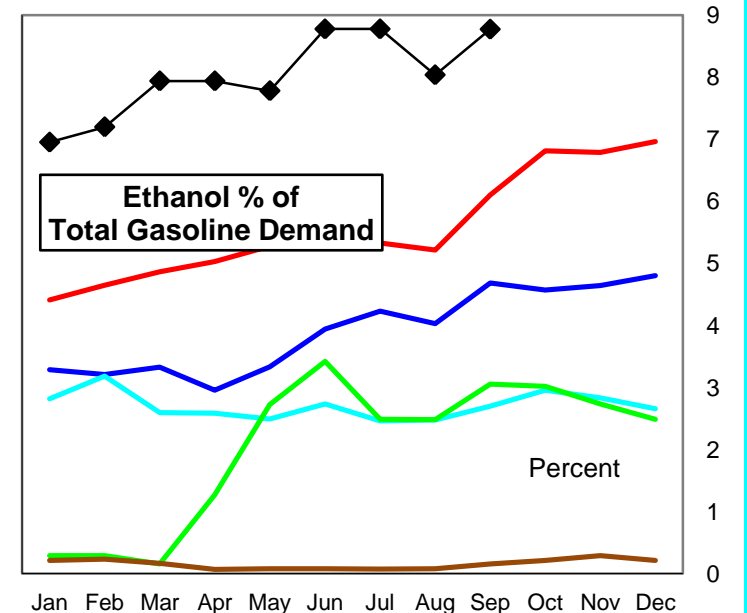
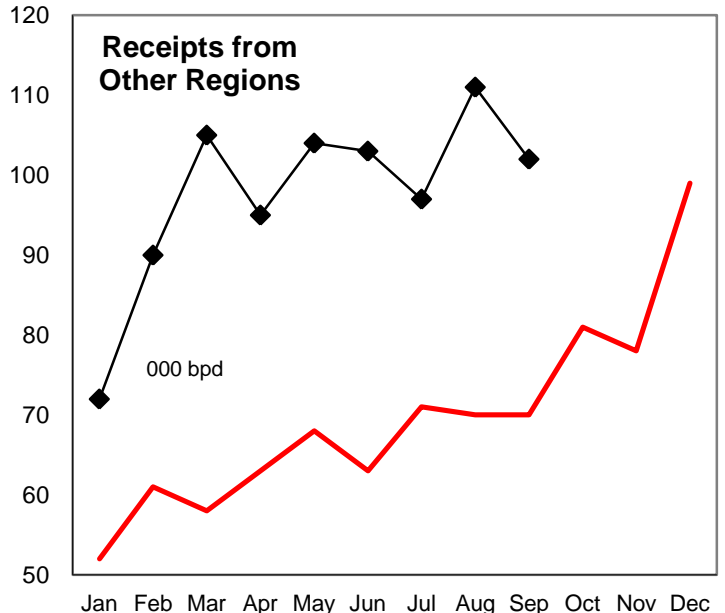
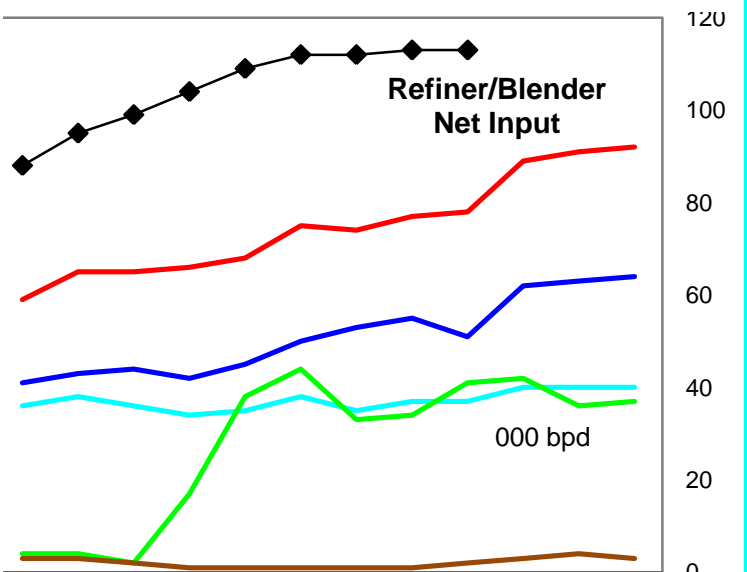
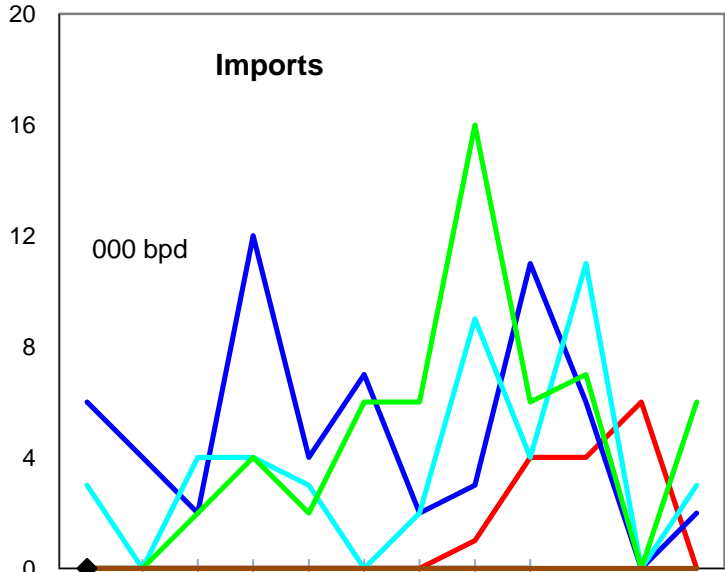
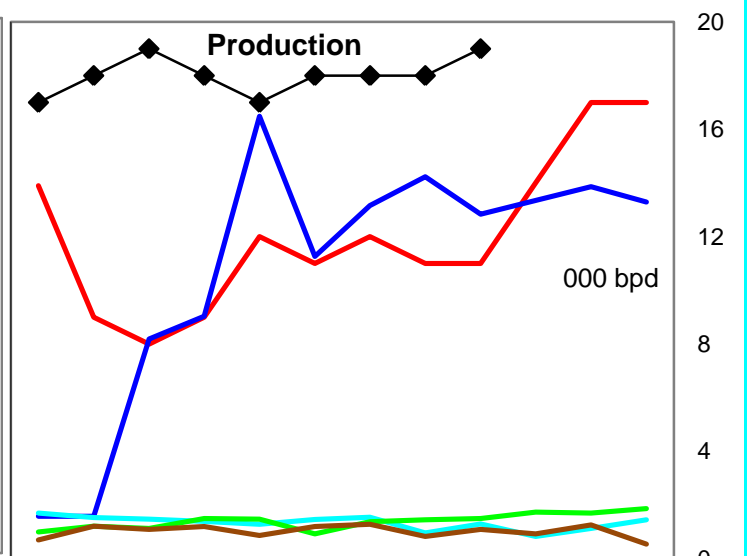
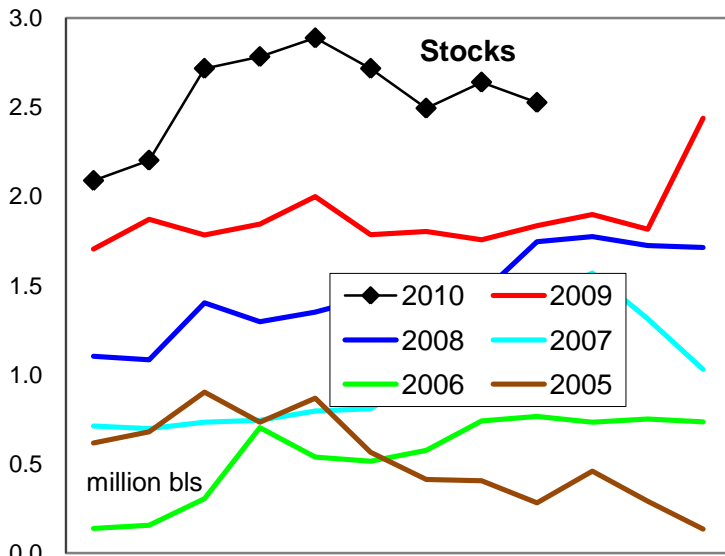
Variance to prior year	Stocks	Production	Imports	Demand
000 bpd (000 bbls stocks)	<b>835</b>	<b>119</b>	0	<b>12</b>
% change	<b>16.6</b>	<b>17.3</b>	#DIV/0!	<b>5.8</b>

### PADD 02 Gasoline/Ethanol Demand and Blending



Variance to prior year	Gasoline Demand	Ethanol Demand	Prod with Ethanol	Prod Excl Ethanol
000 bpd	-4	12	122	31
% change	-0.2	5.8	5.9	-155.0

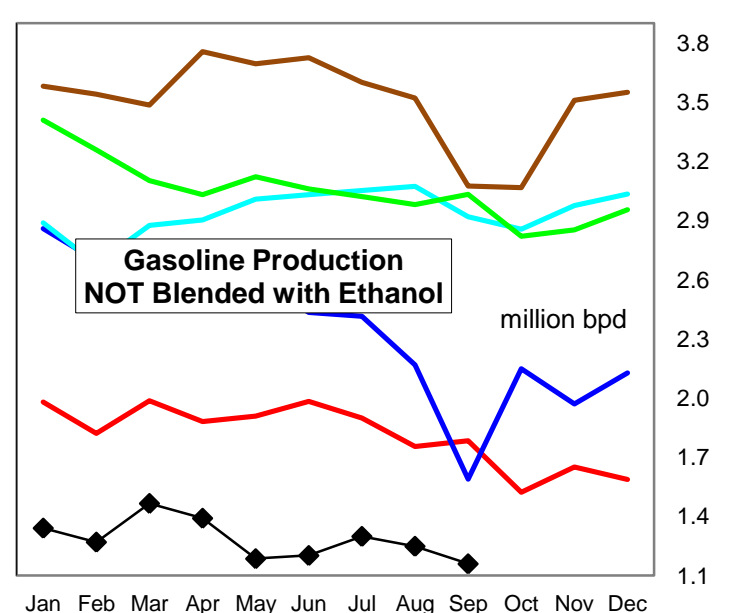
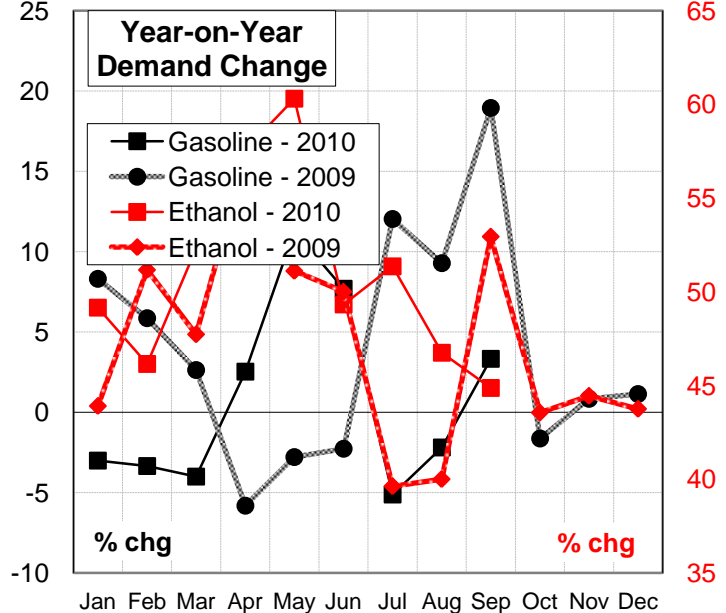
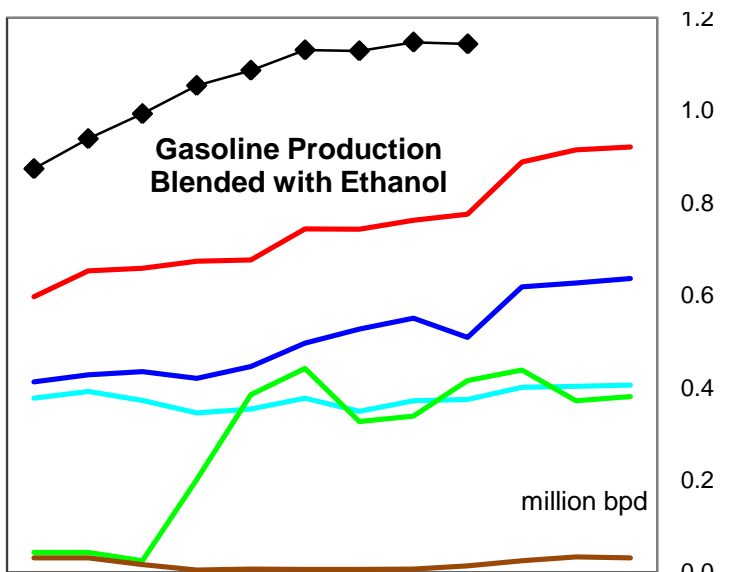
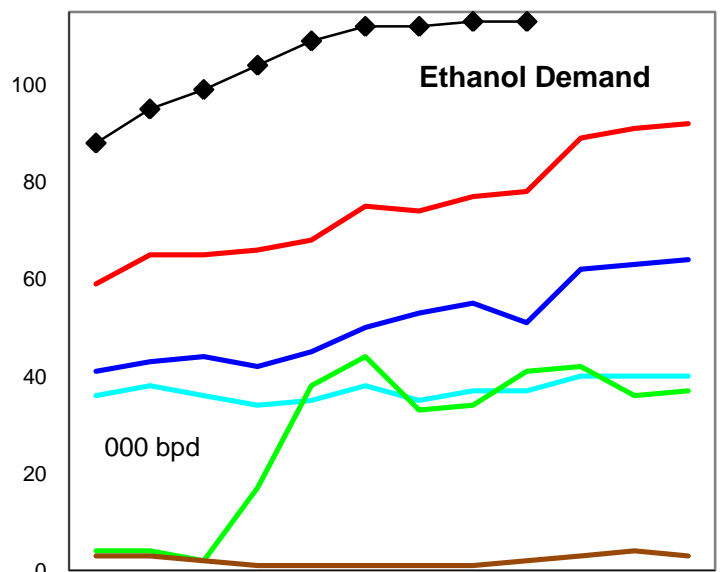
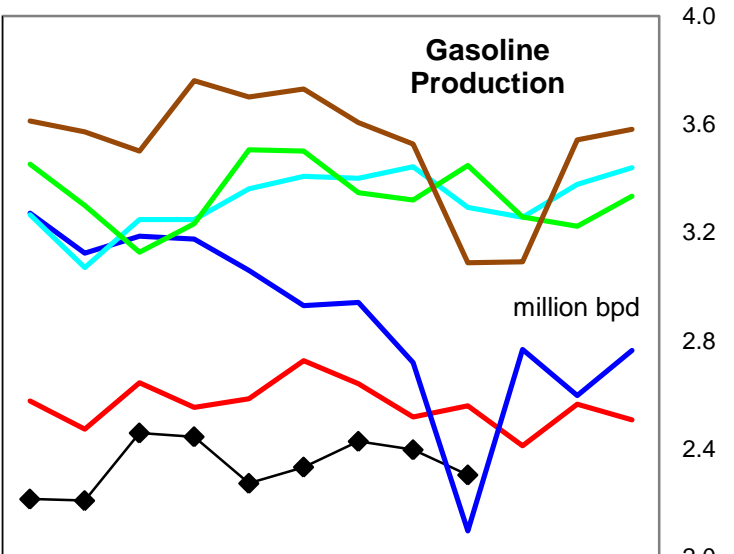
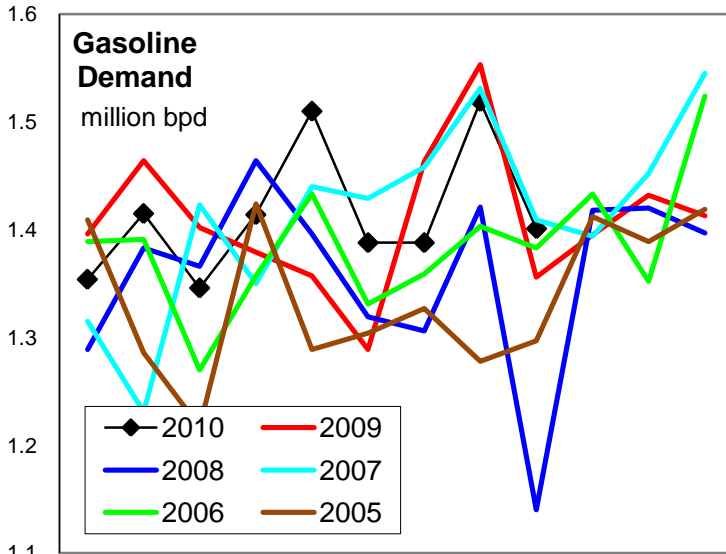
### PADD 3 Ethanol Supply-Demand Balance



Variance to prior year	Stocks	Production	Imports	Demand
000 bpd (000 bls stocks)	691	8	-4	35
% change	37.7	72.7	-100.0	44.9

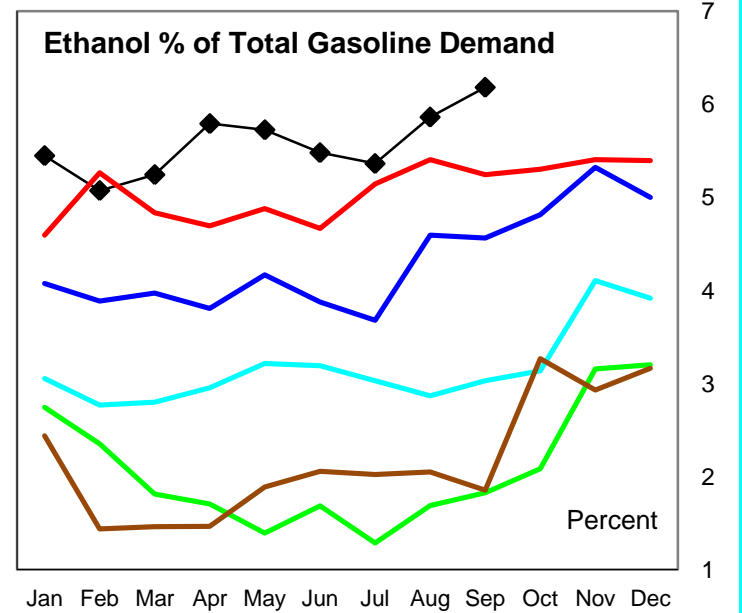
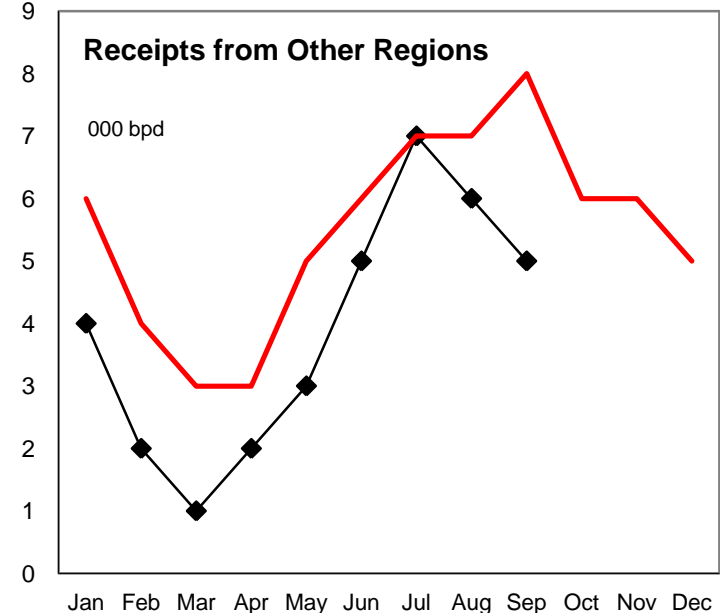
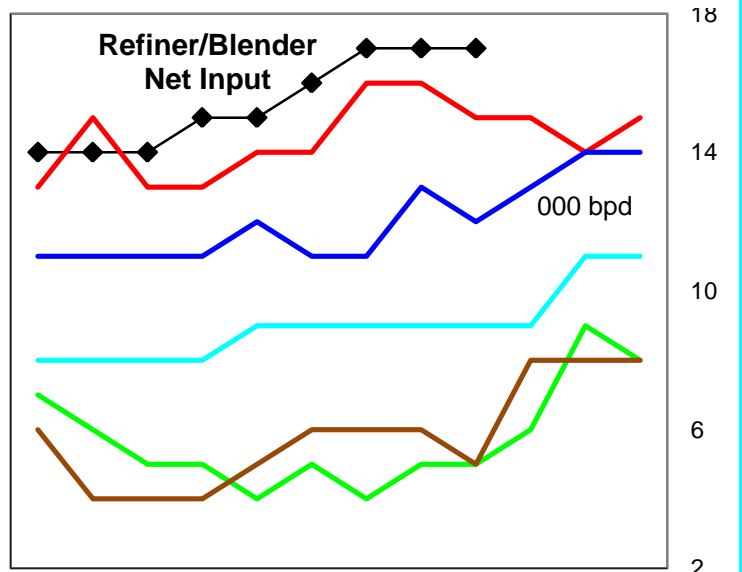
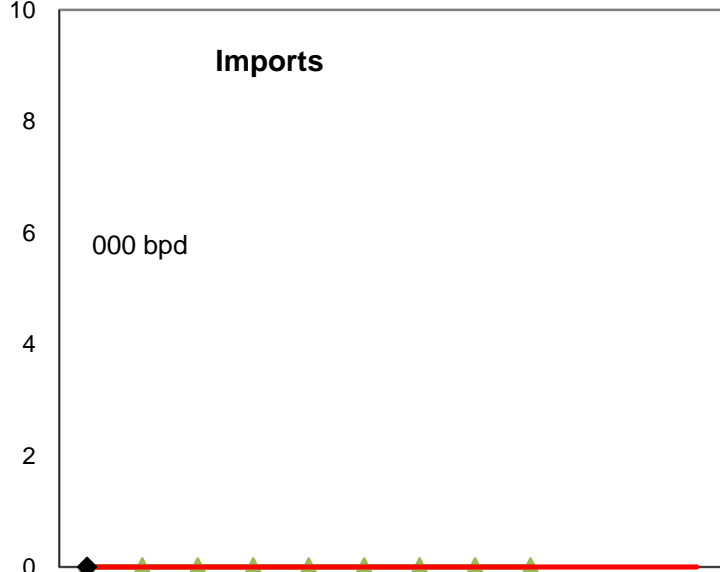
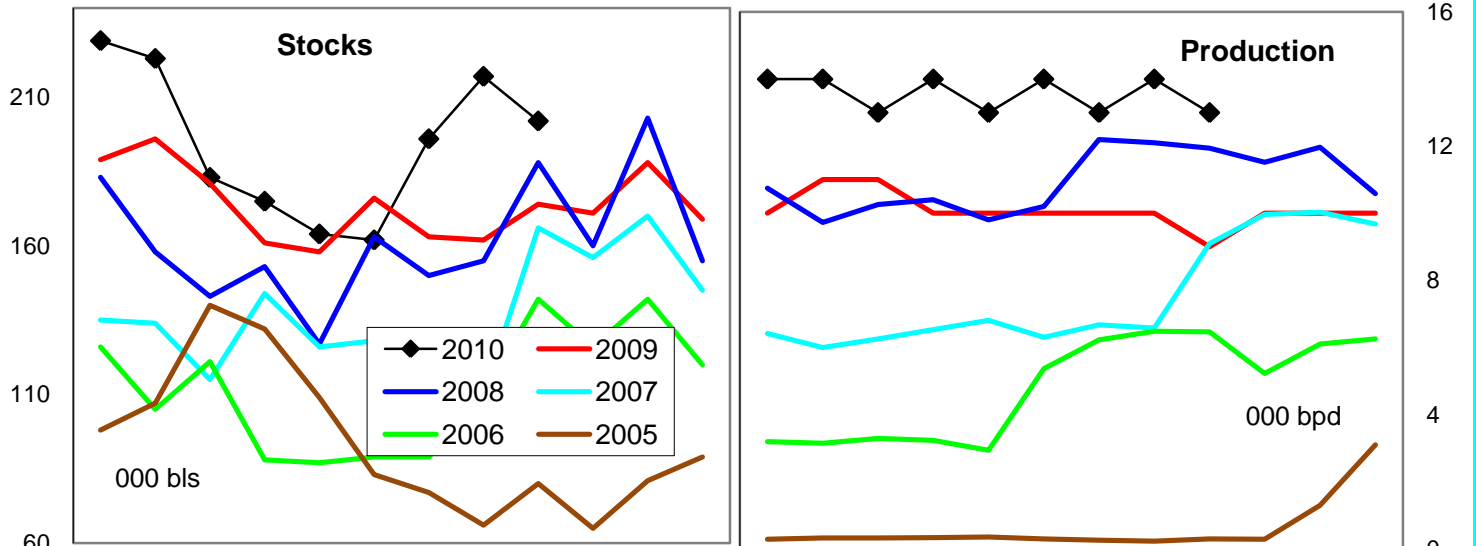


### PADD 03 Gasoline/Ethanol Demand and Blending



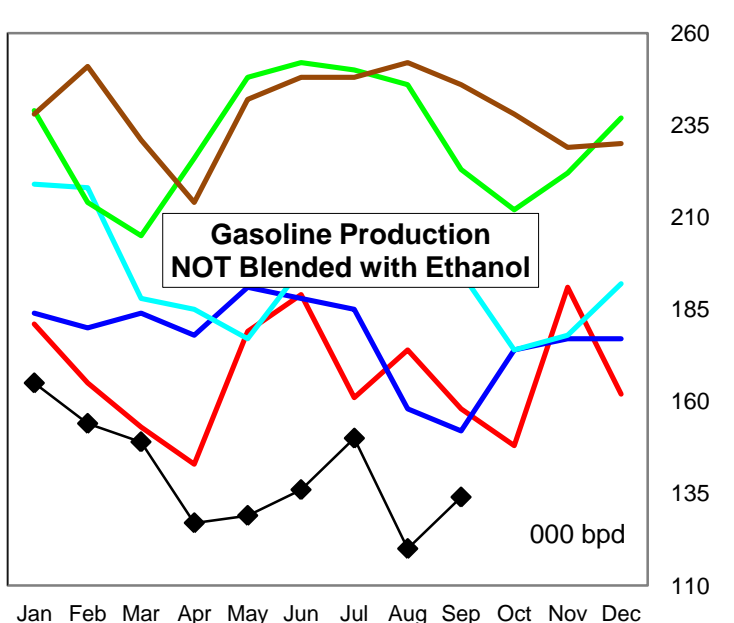
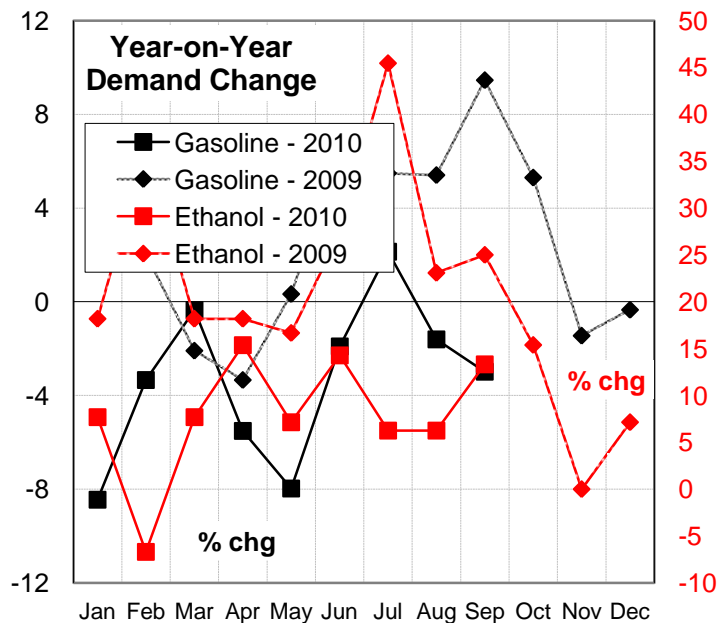
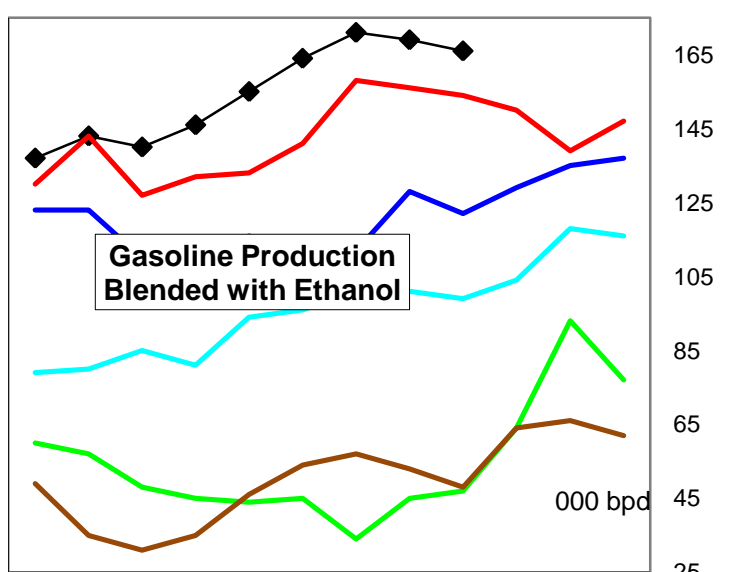
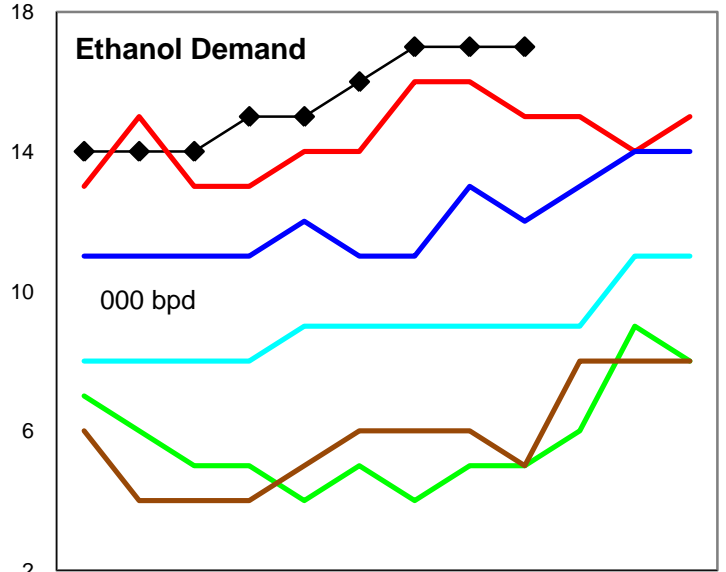
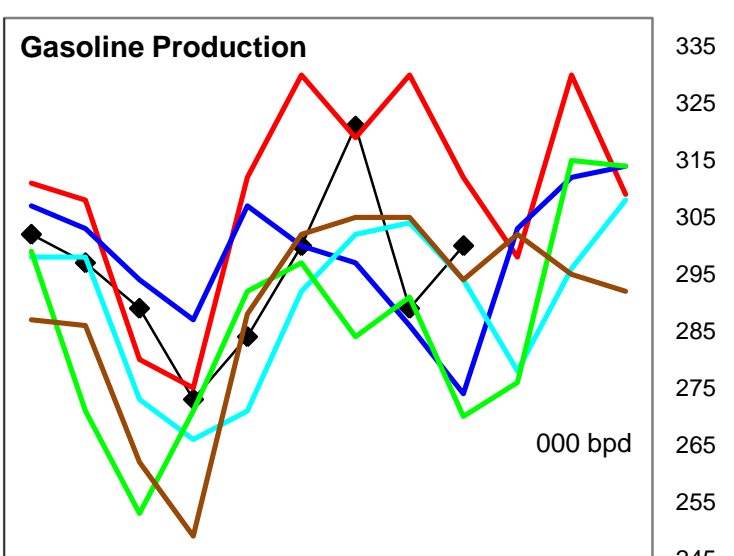
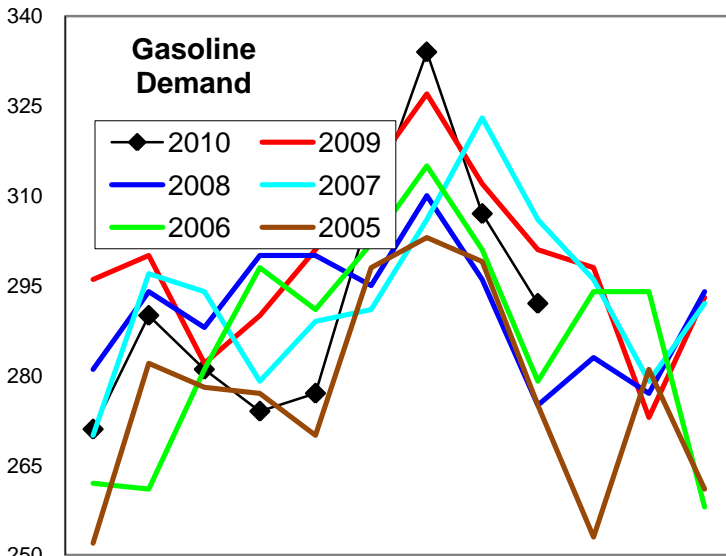
Variance to prior year	Gasoline Demand	Ethanol Demand	Prod with Ethanol	Prod Excl Ethanol
000 bpd	57	35	368	-624
% change	5.5	44.9	47.5	-35.0

### PADD 4 Ethanol Supply-Demand Balance



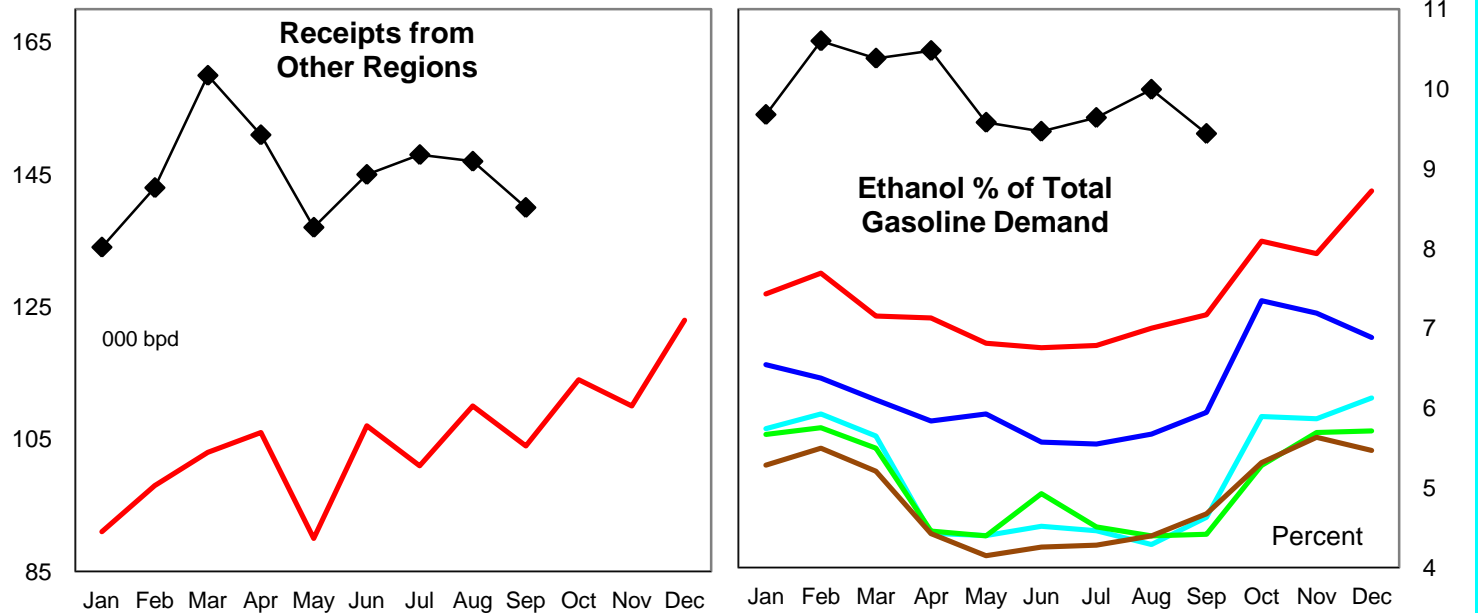
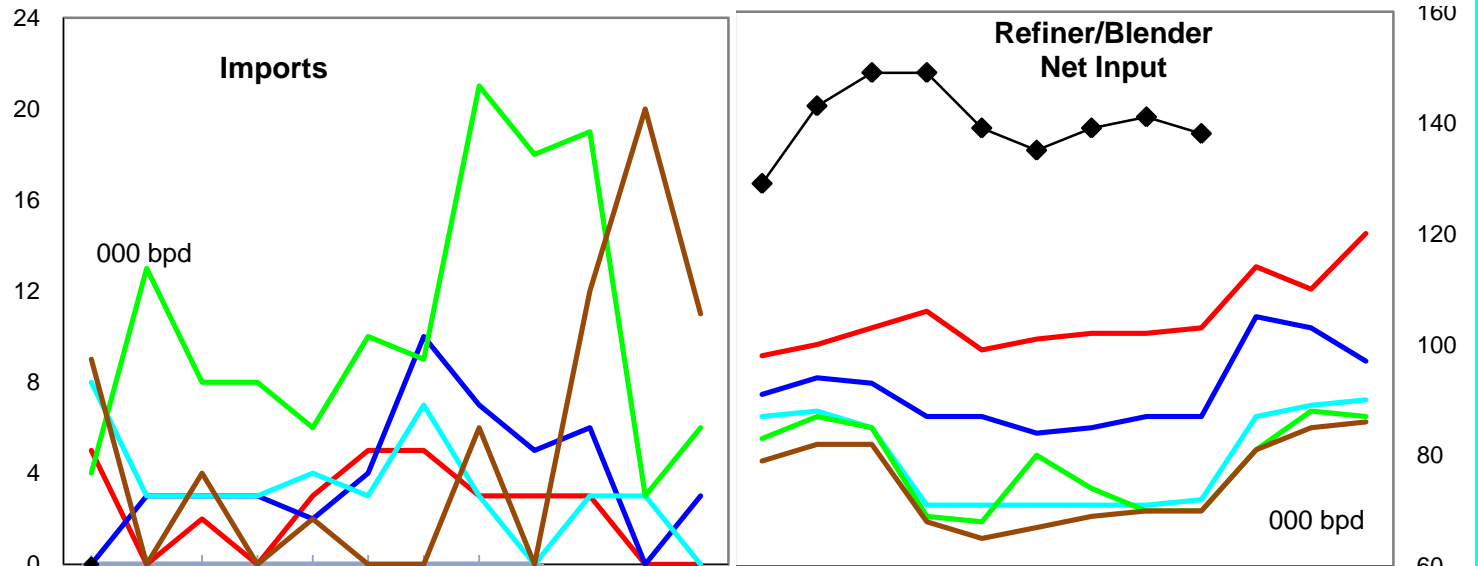
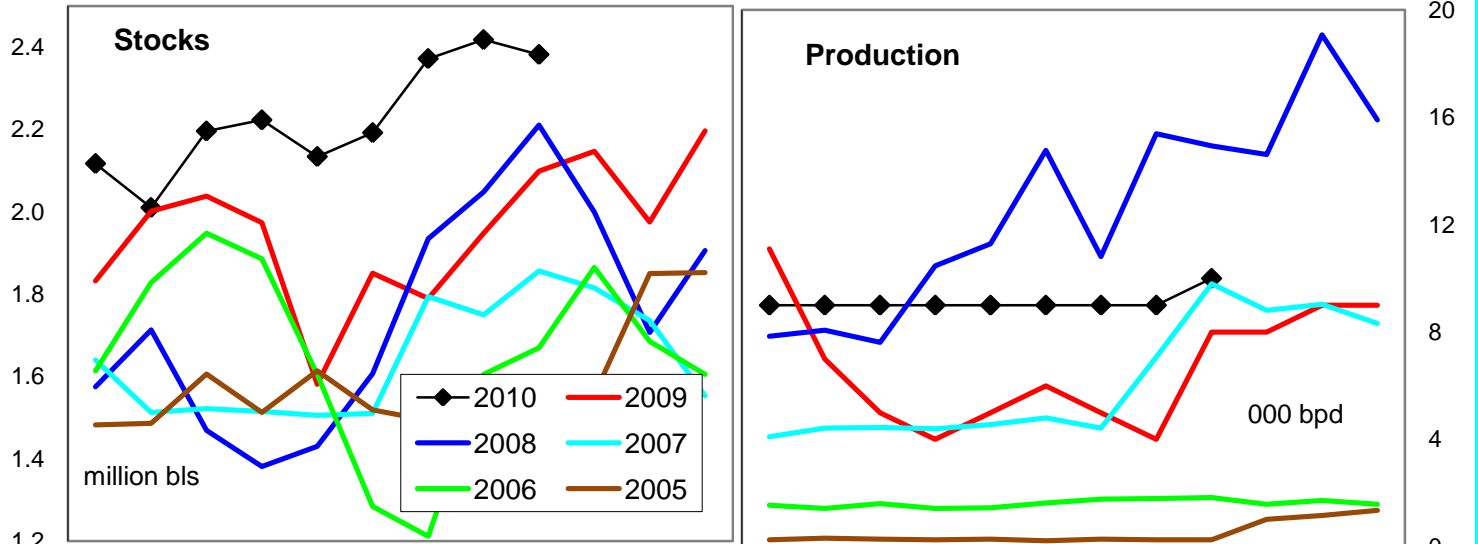
Variance to prior year	Stocks	Production	Imports	Demand
000 bpd (000 bbls stocks)	28	4	0	2
% change	16.1	44.4	#DIV/0!	13.3

### PADD 04 Gasoline/Ethanol Demand and Blending



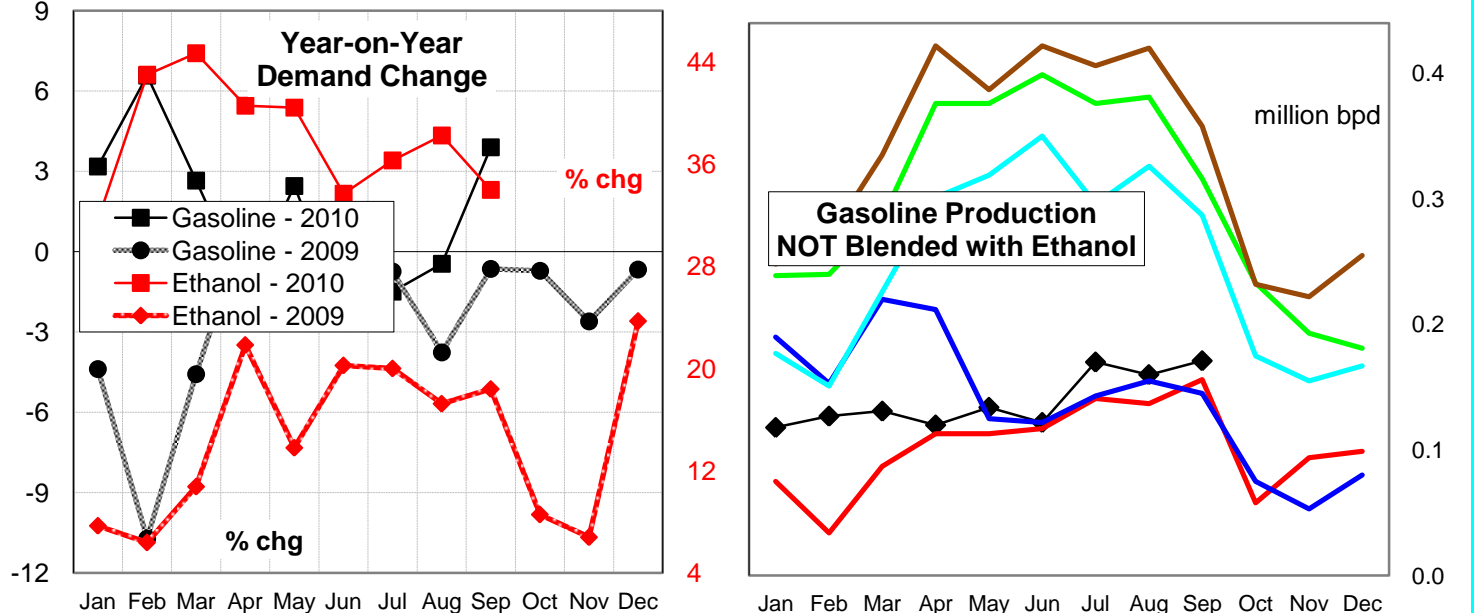
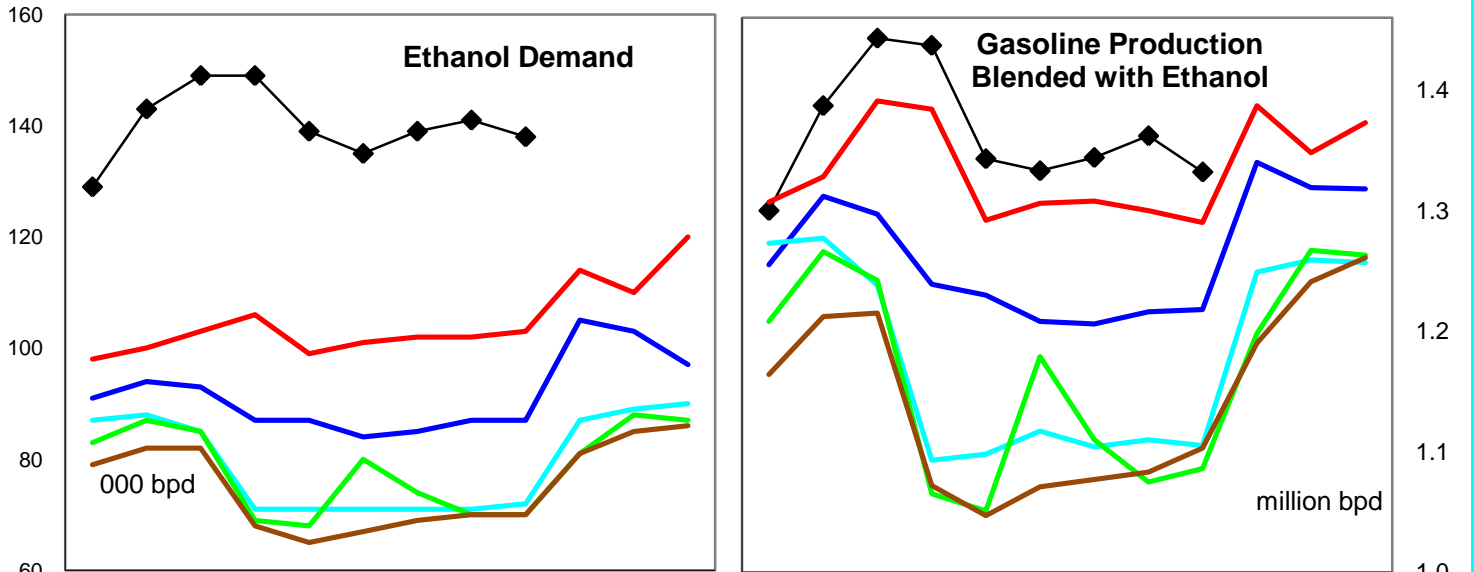
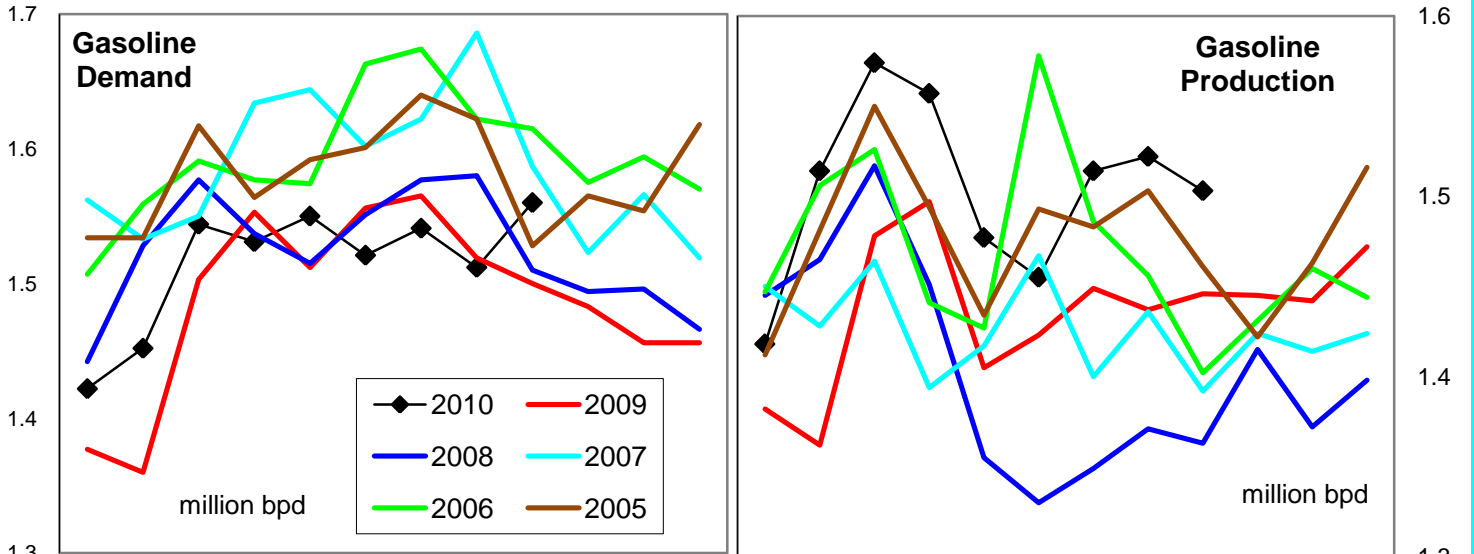
Variance to prior year	Gasoline Demand	Ethanol Demand	Prod with Ethanol	Prod Excl Ethanol
000 bpd	-9	2	12	-24
% change	-3.0	13.3	7.8	-15.2

### PADD 5 Ethanol Supply-Demand Balance



Variance to prior year	Stocks	Production	Imports	Demand
000 bpd (000 bls stocks)	283	2	-3	35
% change	13.5	25.0	-100.0	34.0

### PADD 05 Gasoline/Ethanol Demand and Blending



Variance to prior year	Gasoline Demand	Ethanol Demand	Prod with Ethanol	Prod Excl Ethanol
000 bpd	60	35	42	15
% change	3.9	34.0	3.2	9.6

## Ethanol / Gasoline Fundamental Trends

Item	Monthly Ethanol Supply-Demand Balance						Change From Prior Year		
	Sep10	Aug10	Jul10	Jun10	May10	Apr10	1-Month	3-Mth Avg	6-Mth Avg
<b>U. S. Total</b>									
Production	869	870	857	854	847	832	144	139	158
Imports	0	0	1	1	1	1	-10	-24	-19
EIA Adjustment	-77	-79	-74	-98	-63	-58	-35	-17	-18
Implied Demand	789	805	810	795	784	776	118	129	133
Ending Stocks	17,408	17,340	17,784	18,610	19,721	19,682	1,720	2,516	3,803
Change in stocks	68	-444	-826	-1,111	39	-9			
Wholesale Gasoline Demand	9,163	9,366	9,332	9,284	9,217	9,103	266	138	127
Conv Ethanol Gasoline Blend	4,911	4,995	5,057	4,939	4,786	4,660	883	937	968
Ethanol % of Total Gasoline	9.42	9.40	9.50	9.37	9.30	9.32	1.26	1.51	1.57
<b>PADD 01</b>									
Production	21	24	23	17	16	16	11	14	11
Imports	0	0	0	1	1	1	-4	-19	-16
Receipts from other regions	310	309	304	325	302	306	NA		
Refiner/Blender Net Input	302	309	314	308	304	296	35	39	41
Ending Stocks	6,441	6,448	6,648	7,118	7,220	7,520	-117	426	1,112
Wholesale Gasoline Demand	3,318	3,316	3,365	3,400	3,248	3,310	174	143	63
Conv Ethanol Gasoline Blend	1,802	1,844	1,866	1,809	1,781	1,738	355	378	404
Ethanol % of Total Gasoline	10.01	10.28	10.29	9.96	10.33	9.82	0.73	0.98	1.29
<b>PADD 02</b>									
Production	806	804	793	798	791	775	119	110	132
Deliveries to other regions	-556	-572	-555	-577	-546	-554	NA		
Refiner/Blender Net Input	220	225	228	223	217	213	12	15	15
Ending Stocks	5,857	5,617	6,074	6,421	7,315	6,981	835	851	1,420
Wholesale Gasoline Demand	2,552	2,672	2,664	2,627	2,593	2,534	-4	9	34
Conv Ethanol Gasoline Blend	1,819	1,861	1,891	1,844	1,795	1,756	126	145	139
Ethanol % of Total Gasoline	9.43	9.19	9.36	9.28	9.13	9.18	0.58	0.66	0.53
<b>PADD 03</b>									
Production	19	18	18	18	17	18	8	7	7
Imports	0	0	0	0	0	0	-4	-2	-1
Receipts from other regions	102	111	97	103	104	95	NA		
Refiner/Blender Net Input	113	113	112	112	109	104	35	36	38
Ending Stocks	2,526	2,640	2,494	2,717	2,888	2,783	691	755	838
Wholesale Gasoline Demand	1,401	1,519	1,388	1,388	1,510	1,414	45	-21	37
Conv Ethanol Gasoline Blend	740	726	729	740	678	646	350	361	371
Ethanol % of Total Gasoline	8.77	8.04	8.78	8.78	7.78	7.94	2.67	2.98	2.83
<b>PADD 04</b>									
Production	13	14	13	14	13	14	4	4	4
Receipts from other regions	5	6	7	5	3	2	NA		
Refiner/Blender Net Input	17	17	17	16	15	15	2	1	2
Ending Stocks	202	217	196	162	164	175	28	39	20
Wholesale Gasoline Demand	292	307	334	308	277	274	-9	-2	-9
Conv Ethanol Gasoline Blend	166	169	171	164	155	146	-224	-202	-177
Ethanol % of Total Gasoline	6.18	5.86	5.36	5.48	5.73	5.79	0.94	0.54	0.73
<b>PADD 05</b>									
Production	10	9	9	9	9	9	2	4	4
Imports	0	0	0	0	0	0	-3	-4	-3
Receipts from other regions	140	147	148	145	137	151	NA		
Refiner/Blender Net Input	138	141	139	135	139	149	35	37	38
Ending Stocks	2,382	2,418	2,372	2,192	2,134	2,223	283	445	413
Wholesale Gasoline Demand	1,600	1,552	1,581	1,561	1,590	1,571	60	10	2
Conv Ethanol Gasoline Blend	384	394	399	382	377	375	41	39	38
Ethanol % of Total Gasoline	9.44	9.99	9.64	9.47	9.58	10.48	2.27	2.71	2.82

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