



WEEKLY MARKET REPORT

A PUBLICATION OF THE

**OIL & GAS
JOURNAL**[®]

November 21, 2024

US Crude Oil Stockpiles Rise with Increased Imports

Data from the US Energy Information Administration (EIA) for the week ending Nov. 15, 2024, indicate:

US crude oil refinery inputs averaged 16.23 million b/d during the week, a decrease of 281,000 b/d from the previous week. Refineries operated at 90.2% of capacity, down 1.2 percentage points from the previous week. Gasoline production decreased by 980,000 b/d to 9.29 million b/d, and distillate fuel production decreased by 132,000 to 4.84 million b/d.

US crude oil imports averaged 7.68 million b/d for the week, up 1.18 million b/d from the previous week. Crude oil exports rose by 938,000 b/d. US crude net imports grew by a corresponding 237,000 b/d during the week.

US crude oil production was estimated at 13.2 million b/d, a decrease from 13.4 million b/d, marking a second consecutive weekly decline. Some offshore production remained offline early last week due to Hurricane Rafael's pass through the Gulf of Mexico.

With increased imports and reduced refining activity offsetting a decrease in crude production, US commercial crude oil inventories rose by 545,000 bbl from the previous week. At 430.3 million bbl, US commercial crude oil inventories were about 4% below the 5-year average for this time of year.

US gasoline stocks rebounded from 2-year lows as demand fell sharply last week. EIA data showed motor gasoline supplied fell to 8.42 million b/d in the week from 9.38 million b/d the week before. Total motor gasoline inventories rose by 2.05 million bbl to 208.93 million bbl, about 4% below the 5-year average. As lower output met weaker demand, distillate fuel inventories decreased slightly by 114,000 bbl to 114.3 million bbl, about 4% below the 5-year average.

Over the recent 4-week span, total products supplied averaged 20.68 million b/d, up 1.25% from the same period last year. Motor gasoline product supplied averaged 8.95 million b/d, up 0.5% from the same period last year. Distillate fuel product supplied averaged 3.79 million b/d over the past 4 weeks, down 6.4% from the same period last year. Jet fuel product supplied averaged 1.69 million b/d, down 1.3% compared with the same 4-week period last year.

The price for West Texas Intermediate (WTI) crude oil was \$67.33/bbl on Nov. 15, 2024, \$3.36 lower than a week ago, and \$9.14 less than a year ago. Weak demand persisted in China, the world's largest crude importer, as its stimulus announcements failed to spur near-term oil demand growth. The Russia-Ukraine conflict and concerns over potential future oil supply disruptions are likely to help support price levels.

According to EIA estimates, working gas in storage was 3,969 bcf as of Friday, Nov. 15, 2024, a net decrease of 3 bcf from the previous week. Stocks were 141 bcf higher than last year at this time and 239 bcf above the 5-year average of 3,730 bcf.

Conglin Xu
Managing Editor-Economics
Oil & Gas Journal

Table of Content

Industry Statistics in Tables.....	3
Commodity Prices	8
US Crude Production.....	9
US Oil Stocks	10
Commercial Crude Oil Stocks, Regional Details	12
Gasoline Stocks, Regional Details	13
Distillate Fuel Oil Stocks, Regional Details.....	14
Kerosene-Type Jet Fuel Stocks, Regional Details	15
Residual Fuel Oil Stocks, Regional Details	16
Product Supplied	17
Refinery Runs, Regional Details	18
Refining Production.....	19
Oil Exports.....	20
Oil Imports	22
Oil Net Imports	24
Working Gas in Underground Storage, Regional Details	25
Appendix.....	26
Disclosures	26

Industry Statistics in Tables

EIA Weekly Petroleum Statistics (Unit: 1,000 b/d; stocks: 1,000 bbl)

Date	25-Oct	01-Nov	08-Nov	15-Nov	Last Week Change
US Crude Production	13,500	13,500	13,400	13,201	-199
Refiner Inputs and Utilization					
Crude Oil Inputs	16,053	16,334	16,509	16,228	-281
Gross Inputs	16,326	16,579	16,754	16,536	-218
Operable Refinery Capacity	18,326	18,326	18,326	18,326	0
Refinery Utilization	89.1	90.5	91.4	90.2	-1.2
Refinery Production					
Gasoline Production	9,695	9,708	10,267	9,287	-980
Distillate Fuel Oil Production	4,863	5,096	4,969	4,837	-132
Jet Fuel Production	1,727	1,787	1,721	1,753	32
Residual Fuel Production	324	283	303	270	-33
Propane/propylene Production	2,754	2,743	2,677	2,702	25
Stocks					
Commercial Crude Stocks	425,509	427,658	429,747	430,292	545
SPR Crude Stocks	385,831	387,223	387,790	389,190	1,400
Total US Crude Stocks	811,340	814,881	817,537	819,482	1,945
Gasoline Stocks	210,868	211,280	206,873	208,927	2,054
Distillate Fuel Oil Stocks	112,862	115,809	114,415	114,301	-114
Jet Fuel Stocks	43,153	42,925	42,211	42,866	655
Residual Fuel Stocks	24,230	23,557	23,732	23,793	61
Propane/propylene Stocks	101,530	100,509	98,368	97,705	-663
Fuel Ethanol Stocks	21,771	22,020	22,039	22,563	524
Other Oil Stocks	308,445	303,480	303,378	303,364	-14
Total Products Stock	822,858	819,580	811,016	813,519	2,503
Total Oil Stocks	1,634,198	1,634,461	1,628,553	1,633,001	4,448
Total Commercial Oil Stocks	1,248,367	1,247,238	1,240,763	1,243,811	3,048
Imports					
Crude Oil Imports	5,975	6,240	6,509	7,684	1,175
Gasoline Imports	495	229	628	374	-254
Distillate Fuel Oil Imports	158	162	108	123	15
Jet Fuel Oil Imports	59	128	117	156	39
Total Products Imports	1,356	1,328	1,788	1,464	-324
Exports					
Crude Oil Exports	4,261	2,850	3,440	4,378	938
Gasoline Exports	786	884	1,177	816	-361
Distillate Fuel Oil Exports	1,279	1,431	1,179	1,201	22
Jet Fuel Oil Exports	202	167	199	218	19
Residual Fuel Exports	153	256	203	175	-28
Propane/propylene Exports	1,578	2,289	1,783	2,180	397
Total Products Exports	6,286	7,617	6,958	6,577	-381
Net Imports					
Crude Oil Net Imports	1,714	3,390	3,069	3,306	237
Products Net Imports	-4,930	-6,289	-5,170	-5,113	57
Total Net Imports	-3,216	-2,899	-2,101	-1,808	293
Product Supplied/Demand					
Gasoline Demand	9,159	8,828	9,383	8,419	-964
Distillate Fuel Oil Demand	3,881	3,406	4,098	3,775	-323
Jet Fuel Demand	1,629	1,780	1,741	1,598	-143
Residual Fuel Demand	468	288	213	172	-41
Propane/propylene Demand	1,310	710	1,319	740	-579
Total Product Demand	21,638	19,739	21,583	19,771	-1,812

Sources: EIA, OGJ

Oil & Gas Journal Industry Statistics

REFINERY REPORT							
District	REFINERY OPERATIONS		REFINERY OUTPUT				
	Gross inputs	Crude oil inputs	Total motor gasoline	Jet fuel Kerosine	-----Fuel oils----- Distillate Residual		Propane/propylene
	----- (1,000 b/d) -----		----- (1,000 b/d) -----				
PAD 1	749	740	3,148	73	193	44	225
PAD 2	3,714	3,731	2,461	295	1,121	42	555
PAD 3	9,213	8,990	2,177	924	2,878	119	1,657
PAD 4	593	595	347	33	183	10	265
PAD 5	2,268	2,173	1,414	429	463	55	--
November 15, 2024	16,537	16,229	9,547	1,754	4,838	270	2,702
November 8, 2024	16,754	16,509	9,669	1,721	4,969	303	2,677
November 17, 2023 ²	15,901	15,504	9,449	1,699	4,938	270	2,597
	18,326 Operable capacity		90.2 % utilization rate				

¹ Includes Pad 5. ² Revised.
Source: US Energy Information Administration.

EXPORTS OF CRUDE AND PRODUCTS			
	Total US		
	11-15-24	11-8-24	11-17-23
----- (1,000 b/d) -----			
Finished motor gasoline	816	1,177	896
Fuel ethanol	144	144	78
Jet fuel-kerosine	218	199	172
Distillate	1,201	1,179	1,048
Residual	175	203	95
Propane/propylene	2,180	1,783	1,787
Other oils	1,843	2,273	2,075
Total products	6,577	6,958	6,151
Total crude	4,378	3,440	4,786
Total exports	10,955	10,398	10,937
Net imports:			
Total	(1,808)	(2,101)	(2,714)
Products	(5,113)	(5,170)	(4,457)
Crude	3,306	3,069	1,743

* Revised.
Source: US Energy Information Administration.

CRUDE AND PRODUCT STOCKS							
District	---Motor gasoline---		Jet fuel Kerosine	-----Fuel oils-----		Propane/propylene	
	Crude oil	Total		Blending Comp.	Distillate		Residual
	----- (1,000 bbl) -----			----- (1,000 bbl) -----			
PAD 1	8,085	51,807	49,128	10,269	33,303	4,446	8,050
PAD 2	107,899	44,509	40,985	7,086	25,311	1,143	28,625
PAD 3	242,129	79,198	74,225	14,255	40,841	14,340	55,212
PAD 4	23,789	7,024	6,020	928	3,713	201	5,817
PAD 5	48,390	26,389	24,937	10,328	11,134	3,663	--
November 15, 2024	430,292	208,927	195,295	42,866	114,302	23,793	97,704
November 8, 2024	429,747	206,873	193,817	42,211	114,415	23,732	98,367
November 17, 2023 ²	448,054	216,421	200,686	37,247	105,561	27,658	99,272

¹ Includes Pad 5. ² Revised.
Source: US Energy Information Administration.

OGJ CRACK SPREAD				
	11-15-24*	11-17-23*	Change	Change, %
	----- \$/bbl -----			
SPOT PRICES				
Product value	87.91	107.91	(20.00)	(18.5)
Brent crude	72.89	84.09	(11.20)	(13.3)
Crack spread	15.02	23.82	(8.80)	(36.9)
FUTURES MARKET PRICES				
One month				
Product value	86.48	102.44	(15.96)	(15.6)
Light sweet crude	67.97	76.49	(8.52)	(11.1)
Crack spread	18.50	25.95	(7.45)	(28.7)
Six month				
Product value	90.91	103.65	(12.74)	(12.3)
Light sweet crude	67.18	75.84	(8.66)	(11.4)
Crack spread	23.72	27.81	(4.09)	(14.7)

* Average for week ending.
Source: Oil & Gas Journal.

IMPORTS OF CRUDE AND PRODUCTS							
	--- Districts 1-4 ---		--- District 5 ---		----- Total US -----		
	11-15-24	11-8-24	11-15-24	11-8-24	11-15-24	11-8-24	11-17-23
	----- (1,000 b/d) -----						
Total motor gasoline	349	608	25	20	374	628	593
Mo. gas. blending comp.	337	550	7	0	344	550	530
Distillate	107	103	16	5	123	108	75
Residual	85	126	1	12	86	138	117
Jet fuel-kerosine	48	27	108	90	156	117	58
Propane/propylene	89	68	35	51	124	119	105
Other	479	542	122	136	601	678	746
Total products	1,157	1,474	307	314	1,464	1,788	1,694
Total crude	6,007	5,202	1,677	1,307	7,684	6,509	6,529
Total imports	7,164	6,676	1,984	1,621	9,148	8,297	8,223

* Revised.
Source: US Energy Information Administration.

BAKER & O'BRIEN INC. US GROSS REFINING MARGINS			
District	11-8-24	11-15-24	11-17-23
	----- \$/bbl -----		
PADD 1	12.18	12.53	23.05
PADD 2	11.20	12.41	27.19
PADD 3	13.84	13.84	16.88
PADD 4	14.90	13.50	28.39
PADD 5	21.46	20.66	35.30
US avg.	14.14	14.29	22.35

Source: Baker & O'Brien Inc.

Historical data are available through Oil & Gas Journal Research Center at <http://www.ogjresearch.com>

OGJ GASOLINE PRICES

	Price ex tax 11-13-24	Pump price* 11-13-24 (c/gal)	Pump price* 11-15-23
(Approx. prices for self-service unleaded gasoline)			
Atlanta	229.6	281.1	284.8
Baltimore	238.5	304.1	321.4
Boston	256.3	302.1	343.1
Buffalo	250.0	294.1	346.0
Miami	251.2	308.2	311.0
Newark	236.3	297.1	324.9
New York	250.7	294.8	346.4
Norfolk	234.6	292.1	311.7
Philadelphia	224.0	301.1	341.0
Pittsburgh	225.0	304.1	347.6
Washington,DC	250.8	304.1	345.0
PAD I Avg.	240.6	298.3	329.4
Chicago	244.1	329.0	354.5
Cleveland	229.5	286.4	306.7
Des Moines	229.9	278.3	298.3
Detroit	221.3	287.7	328.0
Indianapolis	219.6	289.7	321.2
Kansas City	232.0	275.3	299.9
Louisville	232.0	280.5	308.3
Memphis	239.5	285.3	298.1
Milwaukee	243.3	294.6	303.5
Minn.-St. Paul	240.7	287.7	321.8
Oklahoma City	227.2	265.6	295.5
Omaha	228.1	276.5	314.9
St. Louis	248.1	291.5	302.6
Tulsa	240.7	279.1	293.9
Wichita	230.0	273.5	309.8
PAD II Avg.	233.7	285.4	310.5
Albuquerque	224.2	261.4	313.8
Birmingham	217.7	266.3	291.4
Dallas-Ft. Worth	222.8	261.2	277.9
Houston	223.0	261.4	282.2
Little Rock	226.9	270.3	306.3
New Orleans	226.9	266.3	308.1
San Antonio	219.9	258.3	272.9
PAD III Avg.	223.0	263.6	293.2
Cheyenne	248.3	290.7	335.2
Denver	257.1	304.8	314.7
Salt Lake City	274.4	330.0	346.3
PAD IV Avg.	259.9	308.5	332.1
Los Angeles	338.5	425.0	492.3
Phoenix	260.9	298.3	373.2
Portland	277.9	336.3	403.0
San Diego	267.0	353.5	509.6
San Francisco	360.5	447.0	505.5
Seattle	348.0	419.2	454.2
PAD V Avg.	308.8	379.9	456.3
Week's avg.	246.4	300.3	334.9
Sept. avg.	257.4	311.3	365.9
Aug. avg.	268.5	322.3	384.5
2024 to date	278.0	331.9	--
2023 to date	301.7	355.6	--

*Includes state and federal motor fuel taxes and state sales tax. Local governments may impose additional taxes.
Source: Oil & Gas Journal

PETRODATA RIG COUNT - Nov. 15, 2024

	Total supply of rigs	Marketed supply of rigs	Marketed contracted	Marketed utilization rate (%)
US Gulf of Mexico	48	35	26	74.3
South America	46	42	42	100.0
Northwest Europe	55	53	47	88.7
West Africa	45	37	30	81.1
Middle East	195	180	171	95.0
Southeast Asia	55	51	43	84.3
Worldwide	694	613	554	90.4

Source: S&P Global Commodity Insights

US NATURAL GAS STORAGE¹

	11-15-24	11-8-24	11-15-23	Change, %
-----bcf-----				
East	931	943	922	1.0
Midwest	1,140	1,141	1,117	2.1
Mountain	293	291	255	14.9
Pacific	313	312	295	6.1
South Central	1,291	1,285	1,239	4.2
Salt	347	346	331	4.8
Nonsalt	944	939	908	4.0
Total US	3,968	3,972	3,828	3.7
-----Aug.-24 Aug.-23 Change, %				
Total US ²	3,370	3,168	3,168	6.4

¹Working gas ²At end of period.
Source: US Energy Information Administration.

BAKER HUGHES RIG COUNT

	11-15-24	11-17-23
Alabama	0	0
Alaska	10	9
Arkansas	0	0
California	6	5
Land	4	4
Offshore	2	1
Colorado	11	18
Florida	0	0
Illinois	0	0
Indiana	0	0
Kansas	0	0
Kentucky	0	0
Louisiana	33	39
Land	21	22
Inland waters	2	2
Offshore	10	15
Maryland	0	0
Michigan	1	1
Mississippi	0	0
Montana	1	2
Nebraska	0	0
New Mexico	102	107
New York	0	0
North Dakota	34	31
Ohio	10	12
Oklahoma	43	37
Pennsylvania	15	19
South Dakota	0	0
Texas	279	302
Land	277	300
Inland waters	0	0
Offshore	2	2
Utah	11	12
West Virginia	10	8
Wyoming	18	16
Others-HI, NV	0	0
Total US	584	618
Total Canada	200	196
Grand total	784	814
US Oil Rigs	478	500
US Gas Rigs	101	114
Total US Offshore	14	19
Total US Cum. Avg. YTD	601	696
By Basin		
Ardmore Woodford	1	0
Arkoma Woodford	1	0
Barnett	2	1
Cana Woodford	20	14
DJ-Niobrara	7	15
Eagle Ford	48	50
Fayetteville	0	0
Granite Wash	3	6
Haynesville	32	38
Marcellus	25	27
Mississippian	0	0
Other	97	111
Permian	303	311
Utica	10	12
Williston	35	33

Rotary rigs from spudding in to total depth
Definitions, see OGJ Sept. 18, 2006, p. 46.
Source: Baker Hughes Inc.

REFINED PRODUCT PRICES

	11-15-24* (c/gal)
Spot market product prices	
Motor gasoline	
(Conventional--Regular)	
New York Harbor	205.4
Gulf Coast	190.4
Motor gasoline (RBOB-Regular)	
Los Angeles	208.9
No. 2 Heating oil	
New York Harbor	207.2
No. 2 Distillate	
Ultra-low sulfur diesel fuel	
New York Harbor	215.8
Gulf Coast	208.8
Los Angeles	219.2
Kerosine jet fuel	
Gulf Coast	199.7
Propane	
Mt. Belvieu	78.4

Source: EIA Weekly Petroleum Status Report

OGJ PRODUCTION REPORT

	¹ 11-15-24	² 11-17-23
Crude oil and lease condensate		
----- (1,000 b/d) -----		
Alabama	10	10
Alaska	441	427
California	288	315
Colorado	448	480
Florida	3	3
Illinois	19	19
Kansas	76	74
Louisiana	1,534	1,591
Michigan	12	13
Mississippi	34	35
Montana	73	63
New Mexico	2,075	1,872
North Dakota	1,175	1,272
Ohio	105	91
Oklahoma	384	417
Pennsylvania	12	14
Texas	6,035	6,015
Utah	184	173
West Virginia	36	50
Wyoming	295	283
Other states	33	28
Total	13,272	13,245

¹ OGJ estimate. ² Revised.
Source: Oil & Gas Journal.

US CRUDE PRICES

	11-15-24 (\$/bbl)*
Alaska-North Slope ²⁷	66.12
Light Louisiana Sweet	62.39
California-Midway Sunset ¹³	64.16
California-Buena Vista Hills ²⁸	69.06
Southwest Wyoming Sweet	60.08
Eagle Ford ¹⁵	63.50
East Texas Sweet	60.75
West Texas Sour ³⁴	58.50
West Texas Intermediate	63.50
Oklahoma Sweet	63.50
Texas Upper Gulf Coast	57.25
Michigan Sour	55.50
Kansas Common	62.50
North Dakota Sweet	60.25

*Current major refiner's posted prices except North Slope lags 2 months.
⁴⁰° gravity crude unless differing gravity is shown.
Source: Oil & Gas Journal

WORLD CRUDE PRICES

OPEC reference basket, wkly. avg. (\$/bbl)	11-15-24	71.72		
	---Monthly avg., \$/bbl---	---Year to date---	2023	2024
Spot Crudes	Sept.-24	Oct.-24	2023	2024
OPEC Reference Basket	73.59	74.45	83.11	81.21
Arab light - Saudi Arabia	75.16	75.89	85.04	82.84
Basrah Medium - Iraq	72.31	73.08	80.65	79.65
Bonny light ²⁷ - Nigeria	77.08	77.75	83.52	83.65
Djeno - Congo	66.81	68.13	75.49	74.49
Es Sider - Libya	73.21	74.03	82.51	81.22
Iran heavy - Iran	73.59	74.06	83.31	81.03
Kuwait export - Kuwait	74.69	74.87	84.44	82.01
Meruy - Venezuela	54.91	58.30	63.64	66.21
Murban - UAE	73.41	74.84	83.28	81.02
Rabi light - Gabon	73.80	75.12	82.48	81.48
Saharan blend ⁴⁴ - Algeria	76.21	77.53	83.97	83.08
Zafiro - Equatorial Guinea	76.31	76.98	83.69	83.40
Other crudes				
North Sea dated	74.26	75.58	82.94	81.93
Fateh ³² - Dubai	73.39	74.60	82.32	80.87
Light Louisiana Sweet - USA	71.61	73.63	80.53	79.58
Mars - USA	68.44	70.34	77.48	76.80
Urals - Russia	61.65	62.99	58.57	66.82
West Texas Intermediate - USA	69.67	71.60	78.11	77.11
Differentials				
North Sea dated/WTI	4.59	3.98	4.83	4.82
North Sea dated/LLS	2.65	1.95	2.41	2.35
North Sea dated/Dubai	0.87	0.98	0.62	1.06
Crude oil futures				
NYMEX WTI	69.37	71.56	78.14	76.95
ICE Brent	72.87	75.38	82.63	81.13
DME Oman	72.91	75.03	82.41	80.88
Spread				
ICE Brent-NYMEX WTI	3.50	3.82	4.49	4.18

Source: OPEC Monthly Oil Market Report

Historical data are available through Oil & Gas Journal Research Center at <http://www.ogjresearch.com>

BAKER HUGHES INTERNATIONAL RIG COUNT				
Region	-----Oct. 2024-----			Oct. 2023
	Land	Offsh	Total	Total
-----Number of rigs-----				
LATIN AMERICA				
Argentina	46	1	47	58
Bolivia	5	0	5	3
Brazil	5	12	17	13
Canada	217	2	219	192
Chile	1	0	1	0
Colombia	17	0	17	24
Ecuador	7	0	7	11
Mexico	25	25	50	58
Peru	2	0	2	1
Trinidad	0	2	2	2
United States	568	18	586	623
Venezuela	2	0	2	2
Other	5	0	5	3
Subtotal	900	60	960	990
ASIA-PACIFIC				
Australia	18	5	23	20
Brunei	0	1	1	0
China-offshore	0	49	49	50
India	53	24	77	77
Indonesia	36	6	42	41
Japan	4	0	4	3
Malaysia	0	5	5	6
Myanmar(Burma)	0	0	0	0
New Zealand	2	0	2	1
Papua New Guinea	1	0	1	2
Philippines	4	0	4	1
Taiwan	2	0	2	2
Thailand	2	13	15	13
Vietnam	0	3	3	1
Other	2	1	3	0
Subtotal	124	107	231	217
AFRICA				
Algeria	42	0	42	43
Angola	0	3	3	10
Congo	1	1	2	1
Gabon	2	1	3	2
Kenya	4	0	4	5
Libya	18	0	18	18
Nigeria	8	3	11	13
South Africa	0	0	0	0
Tunisia	2	0	2	2
Other	12	3	15	17
Subtotal	89	11	100	111
MIDDLE EAST				
Abu Dhabi	48	18	66	59
Dubai	1	1	2	1
Egypt	17	5	22	31
Iran**	0	0	0	0
Iraq*	62	0	62	62
Jordan	0	0	0	0
Kuwait	34	0	34	23
Oman	51	0	51	49
Pakistan	15	0	15	12
Qatar	3	8	11	12
Saudi Arabia	68	9	77	86
Sudan**	0	0	0	0
Syria	0	0	0	0
Yemen	0	0	0	0
Other	2	0	2	2
Subtotal	301	41	342	337
EUROPE				
Croatia	1	0	1	1
Denmark	0	1	1	1
France	1	0	1	1
Germany	2	1	3	2
Hungary	2	0	2	2
Italy	4	1	5	4
Netherlands	1	1	2	1
Norway	0	14	14	20
Poland	2	0	2	2
Romania	4	0	4	4
Turkey	26	0	26	22
United Kingdom	1	7	8	10
Other	53	0	53	52
Subtotal	97	25	122	122
Total	1,511	244	1,755	1,777

Source: Baker Hughes Inc.

DRILLING PRODUCTIVITY METRICS						
Oct.-24	Appalachia		Eagle		Permian	Rest of lower 48
	Bakken	Ford	Haynesville	Permian		
Active rigs	33	34	52	34	304	102
New wells drilled	64	70	94	31	449	197
New wells drilled per rig	1.9	2.1	1.8	0.9	1.5	1.9
New wells completed	74	78	96	29	441	205
Cumulative drilled but uncompleted wells	739	309	312	803	885	2,286
Crude oil production from newly completed wells, 1,000 b/d*	13	60	68	0	460	79
Crude oil production from newly completed wells per rig*	0.4	1.7	1.3	0.0	1.5	0.8
Natural gas production from newly completed wells, MMcf/d*	1,090	66	279	488	853	359
Natural gas production from newly completed wells per rig*	31.1	1.9	5.4	14.4	2.7	3.7

*One year trend.
Source: US Energy Information Administration

PROPANE PRICES				
	Sept. 2024	Oct. 2024	Sept. 2023	Oct. 2023
-----c/gal-----				
Mt. Belvieu	65.60	77.40	73.00	67.50

Source: EIA Weekly Petroleum Status Report

WORLD BIOFUELS PRODUCTION			
	Aug. 2024	Sept. 2024	Oct. 2024
-----1,000 b/d-----			
Ethanol			
OECD Americas	1,113	1,031	1,031
OECD Europe	129	119	119
OECD Asia Oceania	4	4	4
Total OECD	1,246	1,154	1,154
Non-OECD	1,236	1,309	1,132
Total ethanol	2,509	2,463	2,286
Biodiesel			
OECD Americas	320	338	338
OECD Europe	269	324	324
OECD Asia Oceania	22	12	12
Total OECD	611	674	674
Non-OECD	595	595	595
Total biodiesel	1,206	1,269	1,269
Total global biofuels	3,715	3,732	3,555

Source: International Energy Agency

BAKER & O'BRIEN INC. US RENEWABLE DIESEL MARGIN	
Oct.-24	Los Angeles ---\$/gal---
CARB diesel	2.27
CA LCFS Benefit	0.45
Renewable volume obligation credits (RINs)	1.20
Federal production tax credit	1.00
Renewable diesel revenue - LA delivered	4.94
Feedstock costs ¹	(3.63)
Operating costs	(0.45)
Renewable diesel cash margin	0.85
Sept.-24	0.66
YTD avg	0.80
2023 avg.	1.44
2022 avg.	1.36

¹Equal portions of soybean oil, tallow, and used cooking oil
Source: Baker & O'Brien Inc., Argus

CRUDE OIL AND NATURAL GAS PRODUCTION FROM SHALE AND TIGHT FORMATIONS				
Oct.-24	US tight oil production (1,000, b/d)		US shale dry natural gas production (MMcf/d)	
	Austin Chalk	120	Bakken	2,600
Bakken	1,150	Barnett	1,600	
Eagle Ford	1,010	Eagle Ford	4,500	
Mississippian	110	Fayetteville	800	
Niobrara Codell	440	Haynesville	12,800	
Permian	5,410	Marcellus	26,000	
Woodford	80	Mississippian	2,300	
Other	300	Niobrara Codell	2,800	
Total	8,620	Permian	18,600	
		Utica	6,200	
		Woodford	2,800	
		Other	2,100	
		Total	83,100	

Source: US Energy Information Administration

MUSE, STANCIL & CO. REFINING MARGINS						
Oct.-24	Gulf Coast	East Coast	Mid-west	West Coast	Northwest Europe	Southeast Asia
	-----\$/bbl-----					
Product revenues	87.74	89.63	91.45	100.62	91.95	82.64
Feedstock costs	(74.96)	(80.53)	(71.57)	(80.99)	(74.27)	(77.88)
Gross margin	12.78	9.10	19.88	19.63	17.68	4.76
Fixed costs	(2.90)	(4.03)	(3.26)	(3.80)	(3.26)	(2.54)
Variable costs	(0.98)	(0.94)	(0.88)	(1.20)	(1.18)	(1.55)
Cash operating margins	8.90	4.13	15.74	14.63	13.24	0.67
Sept.-24	8.78	2.18	16.73	15.83	21.25	(1.98)
YTD avg.	13.77	7.74	18.44	16.69	19.89	0.77
2023 avg.	23.03	15.56	25.65	25.98	24.92	4.76
2022 avg.	28.22	22.45	34.65	28.88	28.92	8.05
2021 avg.	8.66	6.82	15.64	13.25	6.40	(1.09)

Source: Muse, Stancil & Co. See OGJ, Jan. 15, 2001, p. 46.

BAKER & O'BRIEN INC. US GULF COAST LNG OFFTAKER MARGINS		
Oct.-24	Asia	W. Europe
-----MMbtu-----		
Market benchmark price ¹	18.18	12.95
Regas/send-out costs ²	-	(0.40)
Shipping costs	(0.53)	(0.27)
Variable liquefaction costs	(0.31)	(0.31)
Tolling fee	(2.40)	(2.40)
US Henry Hub	(2.20)	(2.20)
Offtaker margins	12.74	7.37
Sept.-24	7.60	5.94
YTD avg	6.39	4.80
2023 avg.	7.33	6.68
2022 avg.	24.32	31.95

¹JKM in Asia; TTF in W. Europe ²W. Europe only (TTF basis)
Source: Baker & O'Brien Inc., US Energy Information Administration, Fearnleys, TradingView

Historical data are available through Oil & Gas Journal Research Center at <http://www.ogjresearch.com>

US INDUSTRY SCOREBOARD							
Latest week	11/15	4 wk. average	4 wk. avg. year ago ¹	Change. %	Year-to-date average ¹	YTD avg. year ago ¹	Change. %
Product supplied (1,000 b/d)							
Motor gasoline		8,947	8,904	0.5	8,864	8,850	0.2
Distillate		3,790	4,050	(6.4)	3,718	3,825	(2.8)
Jet fuel - kerosine		1,687	1,709	(1.3)	1,651	1,618	2.0
Residual		285	254	12.2	281	231	21.6
Other products		5,974	5,511	8.4	5,704	5,668	0.6
TOTAL PRODUCT SUPPLIED		20,683	20,428	1.2	20,218	20,192	0.1
Supply (1,000 b/d)							
Crude production		13,400	13,200	1.5	13,222	12,513	5.7
NGL production		6,948	6,531	6.4	6,752	6,164	9.5
Crude imports		6,602	6,430	2.7	6,579	6,489	1.4
Product imports		1,484	1,680	(11.7)	1,823	2,014	(9.5)
Other supply ²		2,278	3,403	(33.1)	2,407	3,282	(26.7)
TOTAL SUPPLY		30,712	31,244	(1.7)	30,783	30,462	1.1
Net product imports		(5,376)	(4,501)	--	(4,791)	(4,161)	--
Refining (1,000 b/d)							
Crude oil inputs		16,281	15,347	6.1	16,119	15,833	1.8
Gross inputs		16,549	15,703	5.4	16,439	16,327	0.7
% utilization		90.3	85.9	---	89.6	89.9	---
Latest week	Latest week	Previous week¹	Change	Same week year ago¹	Change	Change. %	
Stocks (1,000 bbl)							
Crude oil	430,292	429,747	545	448,054	(17,762)	(4.0)	
Motor gasoline	208,927	206,873	2,054	216,420	(7,493)	(3.5)	
Distillate	114,301	114,415	(114)	105,561	8,740	8.3	
Jet fuel - kerosine	42,866	42,211	655	37,248	5,618	15.1	
Residual	23,793	23,732	61	27,658	(3,865)	(14.0)	
Stock cover (days)³							
Crude	26.4	26.5	(0.4)	29.2	(9.6)		
Motor gasoline	23.4	22.9	2.2	24.3	(3.7)		
Distillate	30.2	29.5	2.4	26.1	15.7		
Propane	95.8	88.9	7.8	97.7	(1.9)		
Futures prices⁴							
Light sweet crude (\$/bbl)	67.97	71.58	(3.61)	76.49	(8.52)	(11.1)	
Natural gas (\$/MMBTU)	2.88	2.71	0.17	3.10	(0.22)	(7.1)	

¹Based on revised figures. ²Includes other liquids, refinery processing gain, and unaccounted for crude oil.

³Stocks divided by average daily product supplied for the prior 4 weeks. ⁴Weekly average of NYMEX daily closing futures prices.

Source: Energy Information Administration, Wall Street Journal

COMMODITY PRICES						
	11-13-24	11-14-24	11-15-24	11-18-24	11-19-24	
ICE Brent (\$/bbl)	72.28	72.56	71.04	73.30	73.31	
Nymex Light Sweet Crude (\$/bbl)	68.26	68.53	66.92	69.17	69.24	
WTI Cushing spot (\$/bbl)	68.76	68.99	67.33	69.46	NA	
Brent spot (\$/bbl)	72.86	73.39	73.45	74.35	NA	
Nymex natural gas (\$/MMBtu)	2.983	2.785	2.823	2.973	2.998	
Spot gas - Henry Hub (\$/MMBtu)	2.060	2.110	1.650	2.080	NA	
ICE gas oil (c/gal)	209.87	212.31	211.37	216.25	216.80	
Nymex ULSD heating oil ² (c/gal)	221.93	221.23	217.09	219.76	221.08	
Propane - Mont Belvieu (c/gal)	79.30	78.50	78.40	78.40	NA	
Butane - Mont Belvieu (c/gal)	112.31	110.79	109.00	110.00	110.28	
Nymex gasoline RBOB ³ (c/gal)	196.51	198.17	194.93	201.83	203.77	
NY Spot gasoline ⁴ (c/gal)	207.00	209.30	205.40	212.00	NA	

¹Not available. ²Ultra-low sulfur diesel. ³Reformulated gasoline blendstock for oxygen blending.

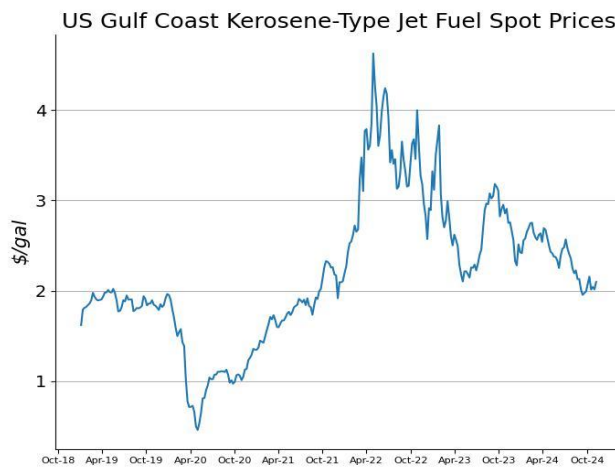
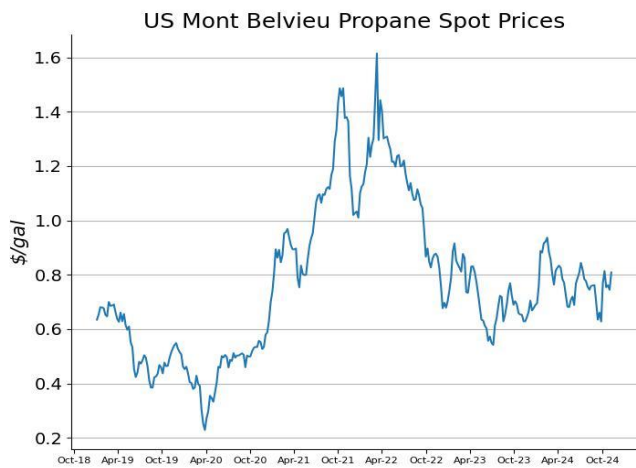
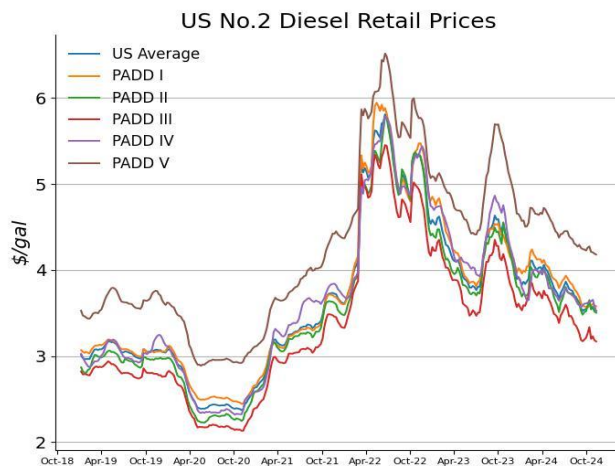
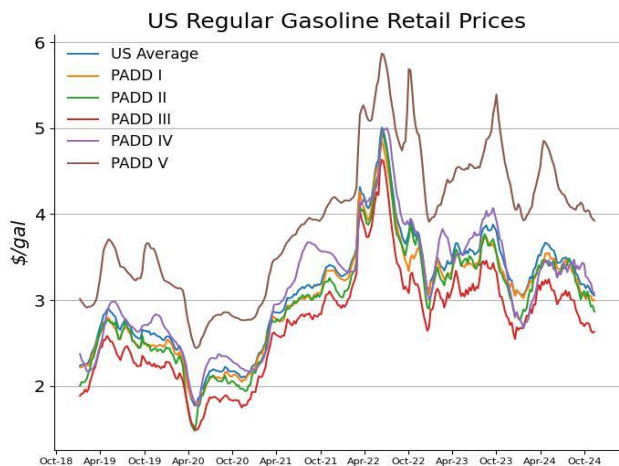
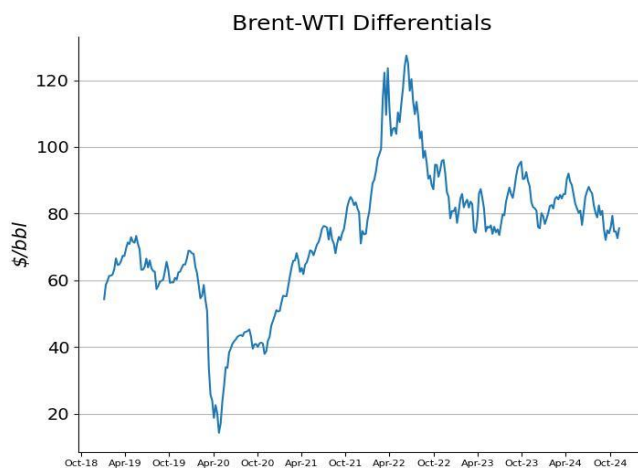
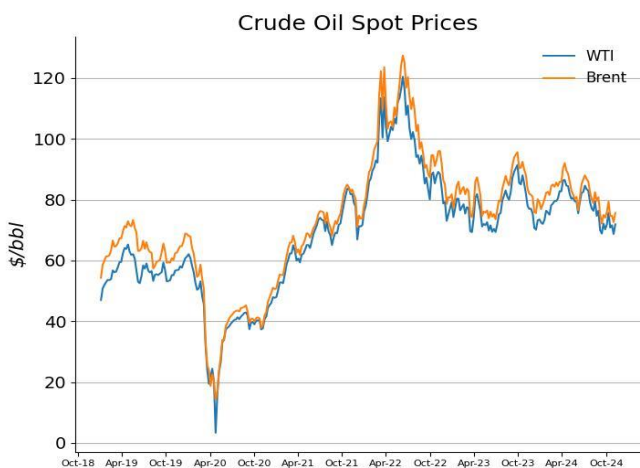
⁴Nonoxygenated regular unleaded.

Historical data are available through Oil & Gas Journal Research Center at <http://www.ogjresearch.com>

Baker Hughes International Rig Count													
	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24
Total World	1,776	1,794	1,739	1,783	1,813	1,793	1,726	1,674	1,707	1,713	1,734	1,751	1,755
Total Onshore	1,533	1,553	1,498	1,538	1,570	1,536	1,470	1,439	1,470	1,474	1,500	1,516	1,511
Total Offshore	243	241	241	245	243	257	256	235	237	239	234	235	244

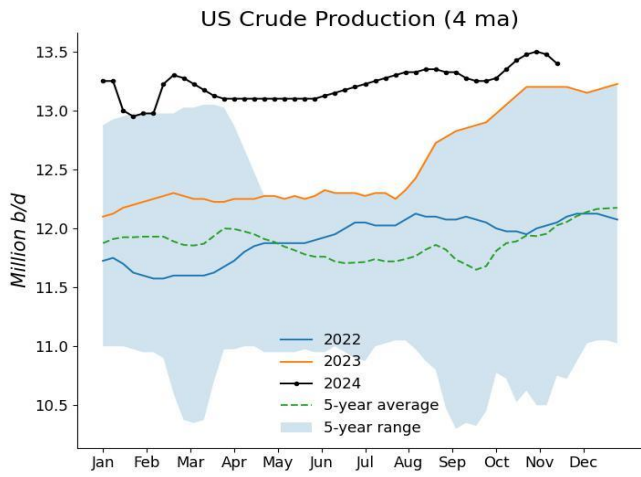
Baker Hughes Rig Count												
	9-1-23	9-8-23	9-15-23	9-22-23	9-29-23	10-6-23	10-13-23	10-20-23	10-27-23	11-3-23	11-10-23	11-17-23
US	631	632	641	630	623	619	622	624	625	618	616	618
Canada	187	182	190	190	191	180	193	198	196	196	199	196
	8-30-24	9-6-24	9-13-24	9-20-24	9-27-24	10-4-24	10-11-24	10-18-24	10-25-24	11-1-24	11-8-24	11-15-24
US	585	582	590	588	587	585	586	585	585	585	585	584
Canada	219	220	218	211	218	223	219	217	216	213	207	200

Commodity Prices



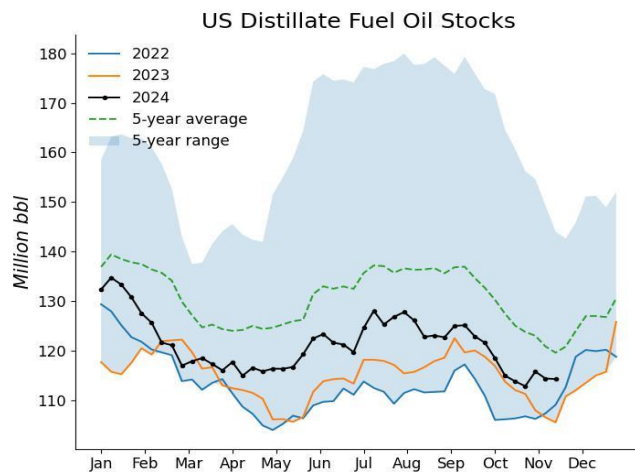
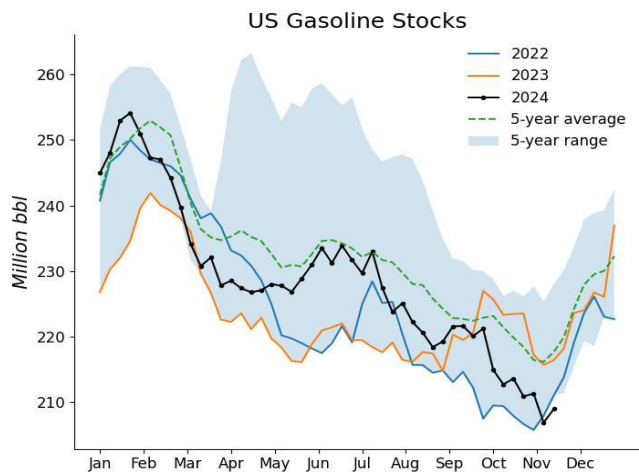
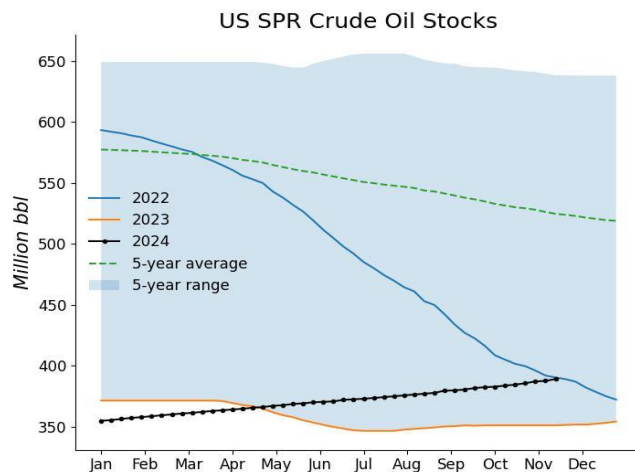
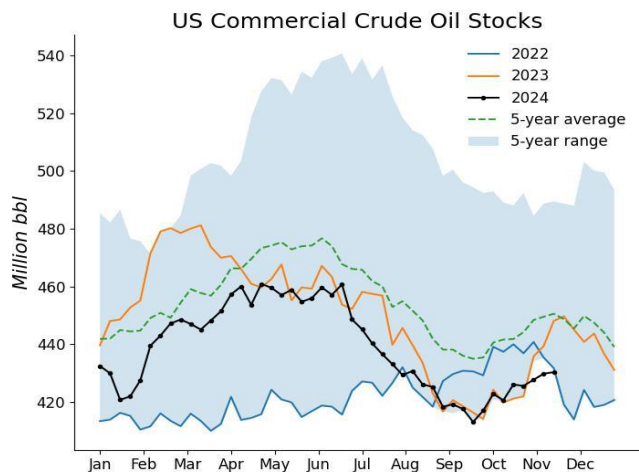
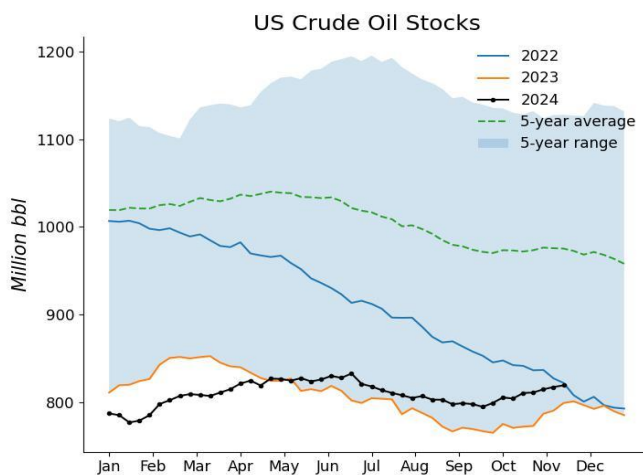
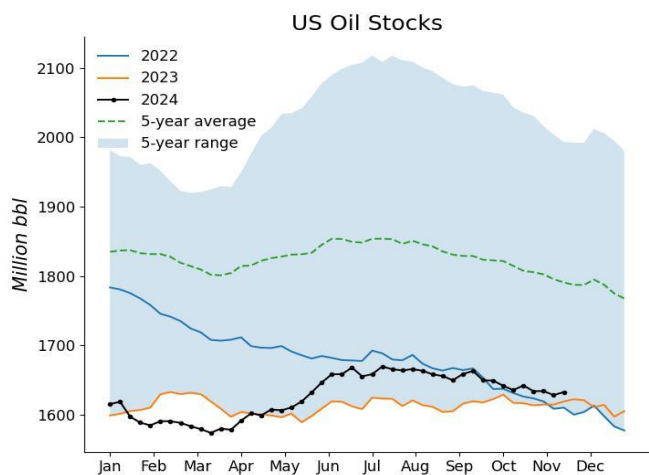
Sources: EIA, OGJ

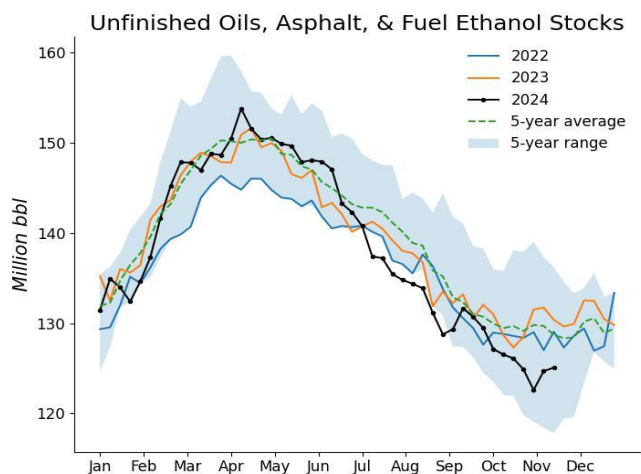
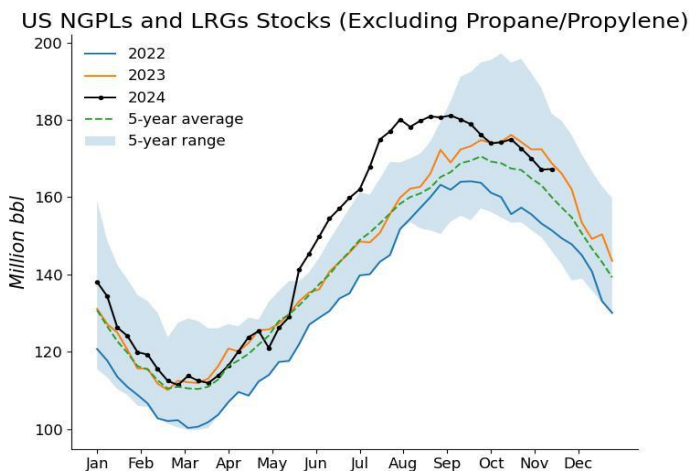
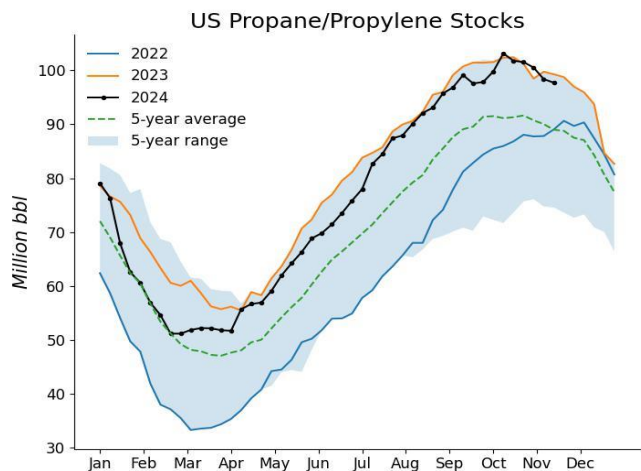
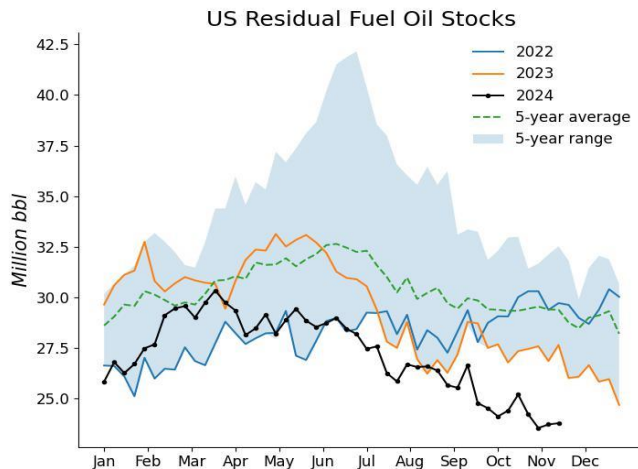
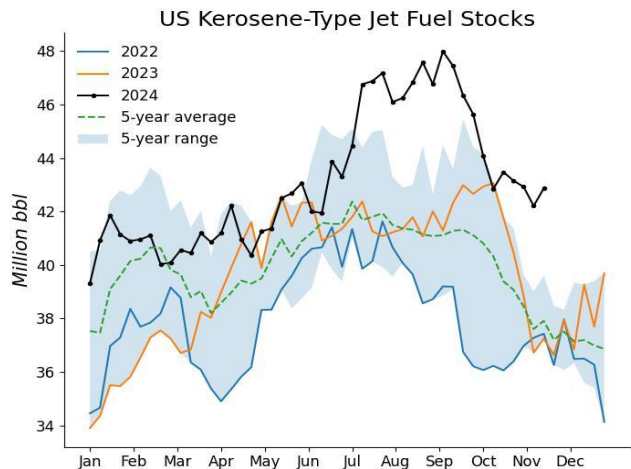
US Crude Production



Sources: EIA, OGJ

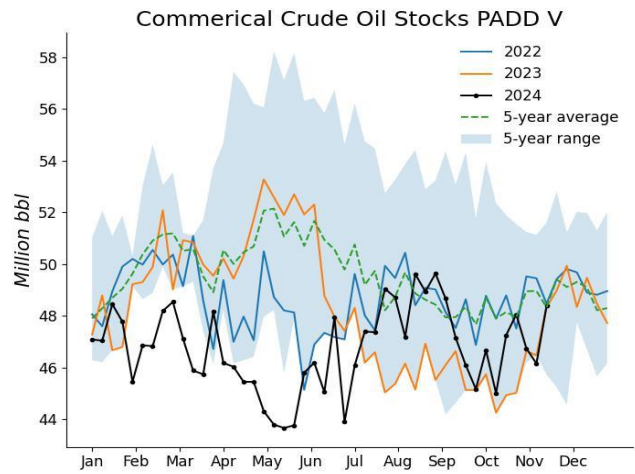
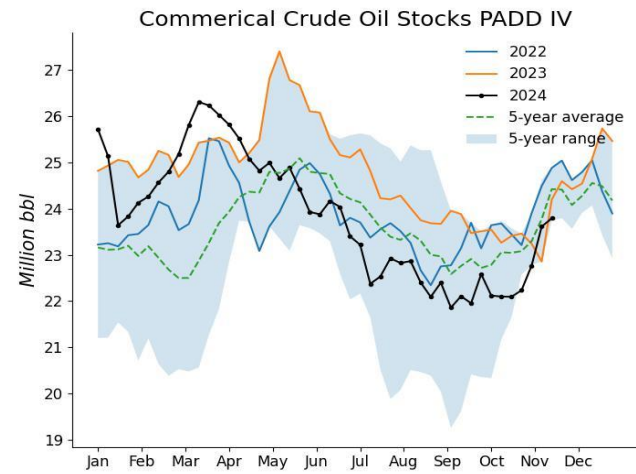
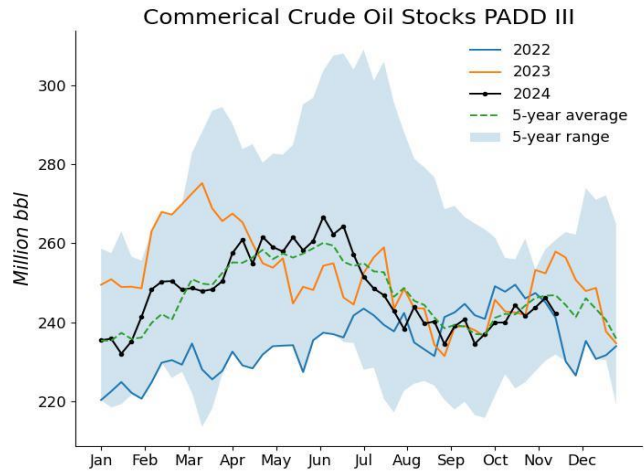
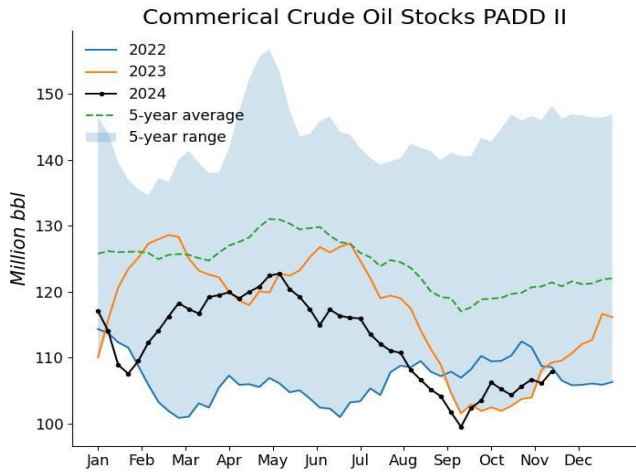
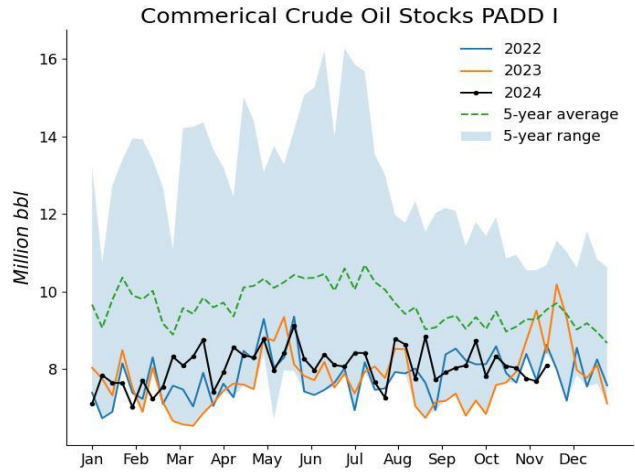
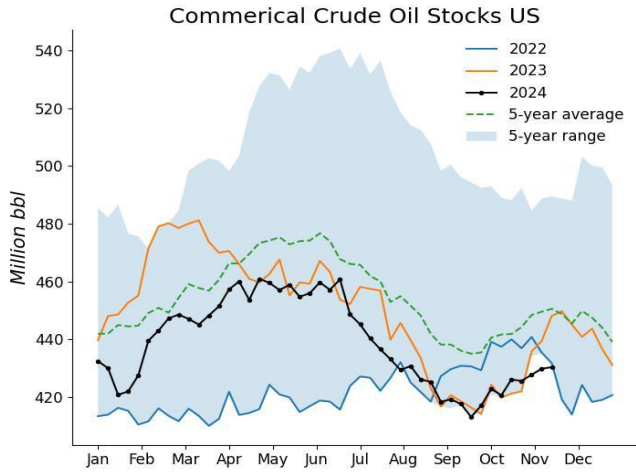
US Oil Stocks





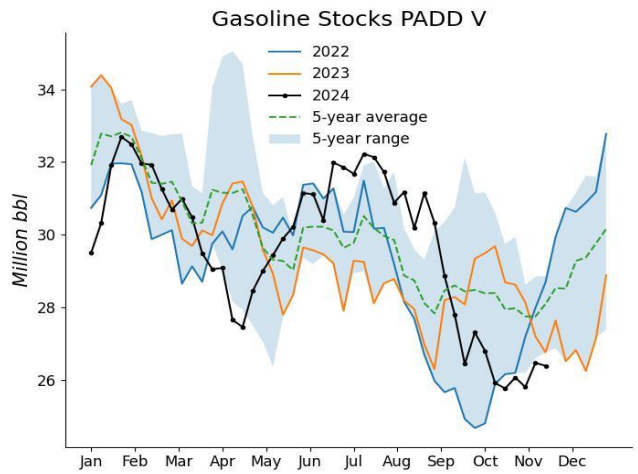
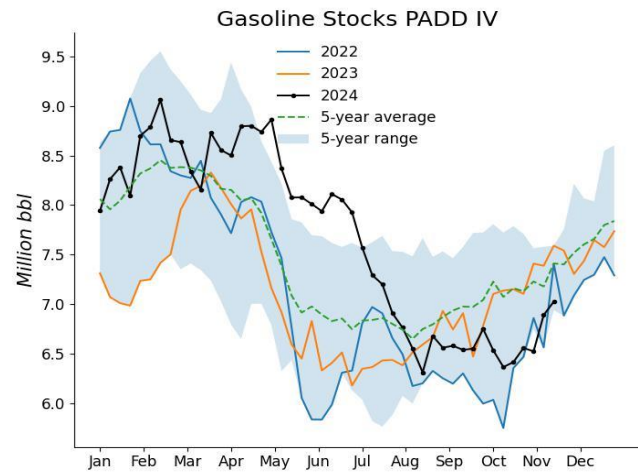
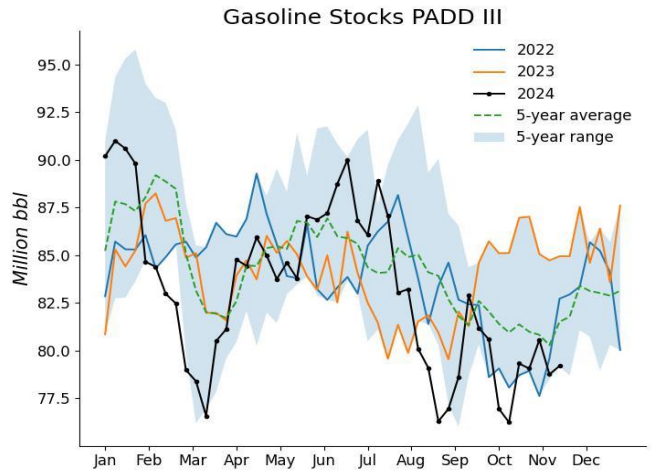
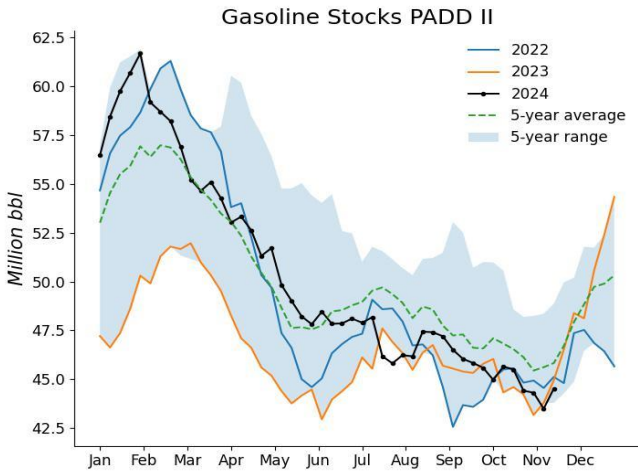
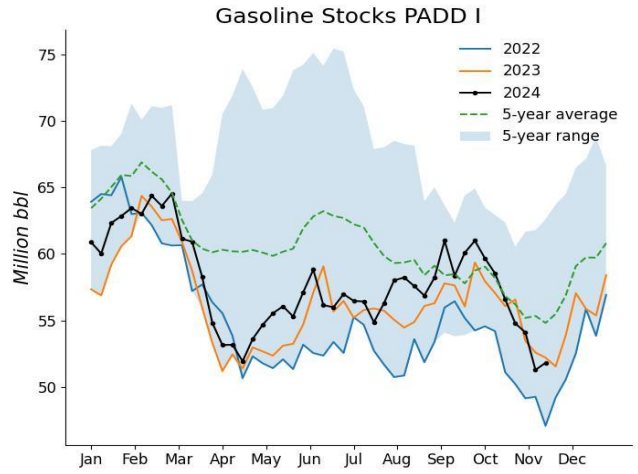
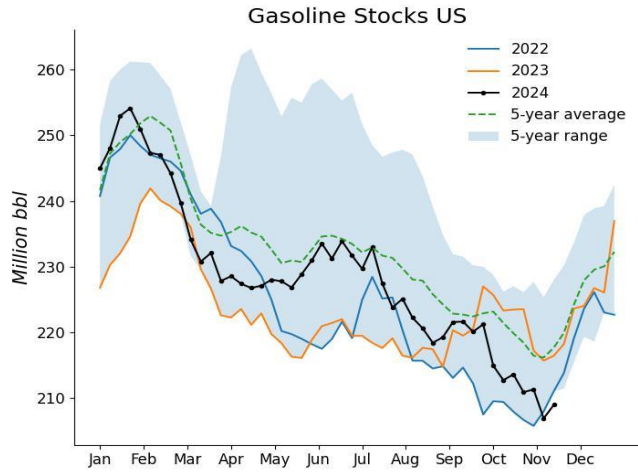
Sources: EIA, OGI

Commercial Crude Oil Stocks, Regional Details



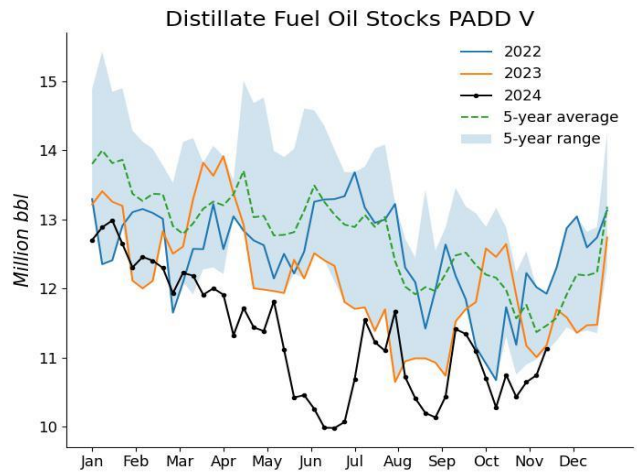
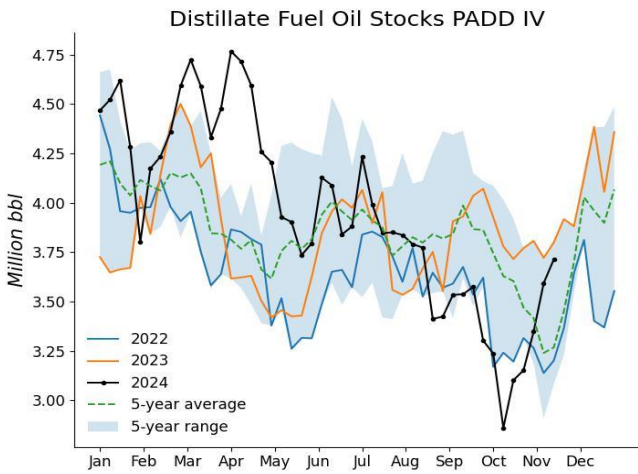
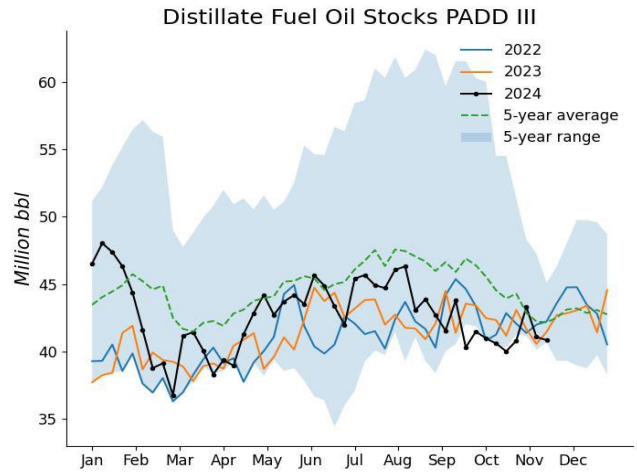
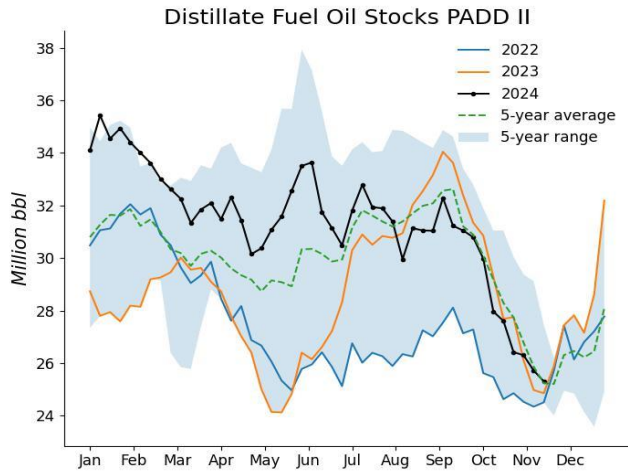
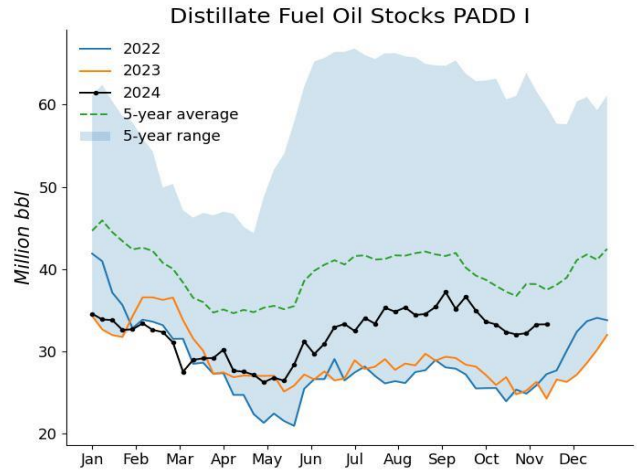
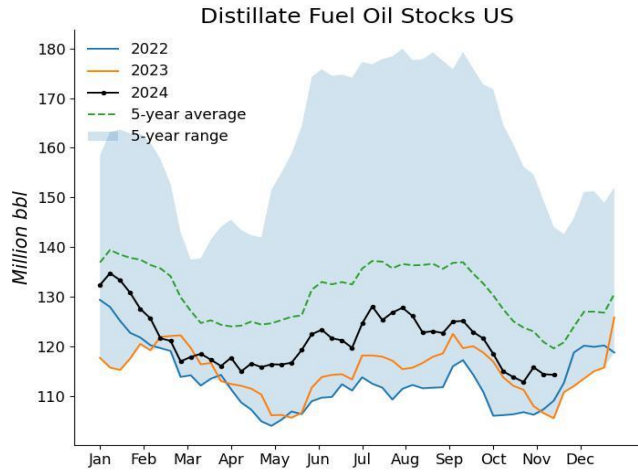
Sources: EIA, OGJ

Gasoline Stocks, Regional Details



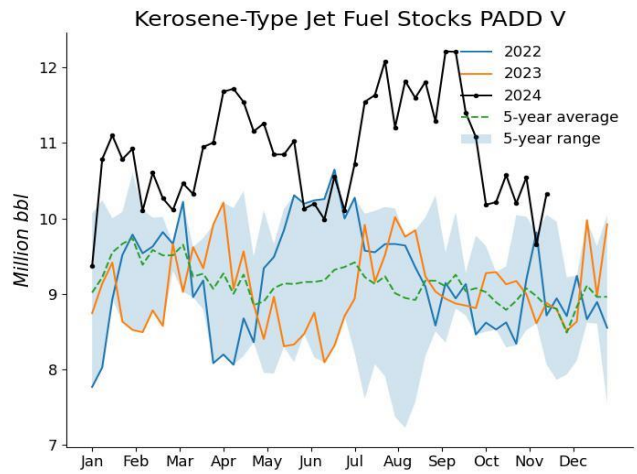
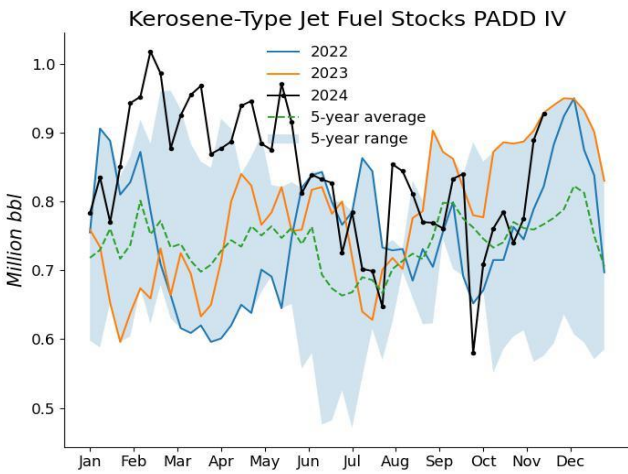
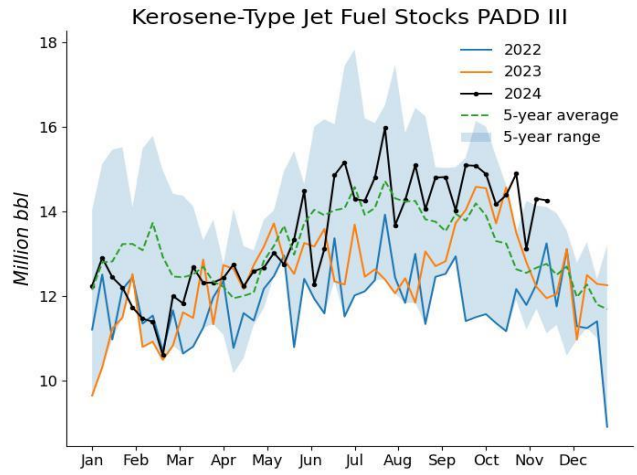
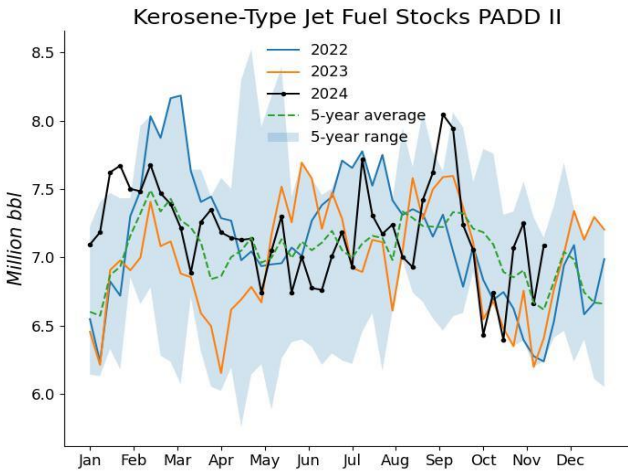
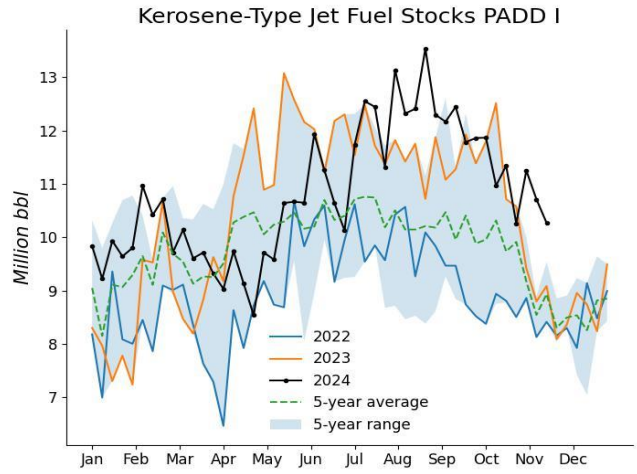
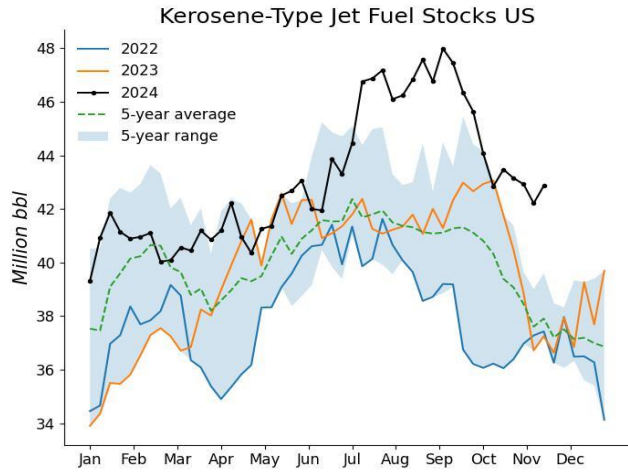
Sources: EIA, OGJ

Distillate Fuel Oil Stocks, Regional Details



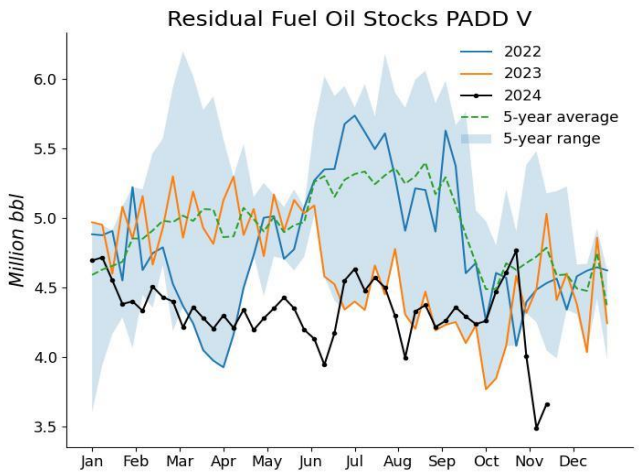
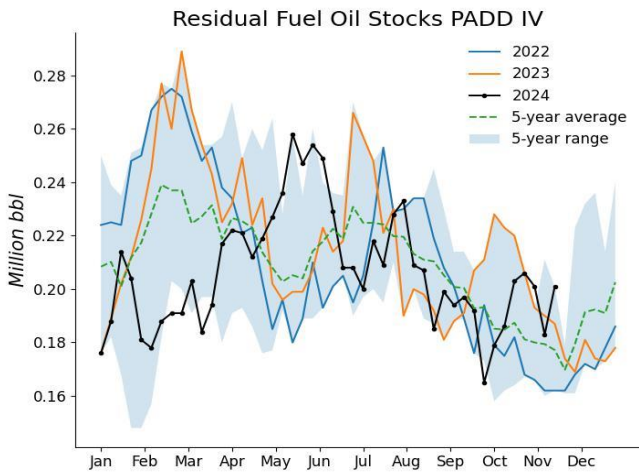
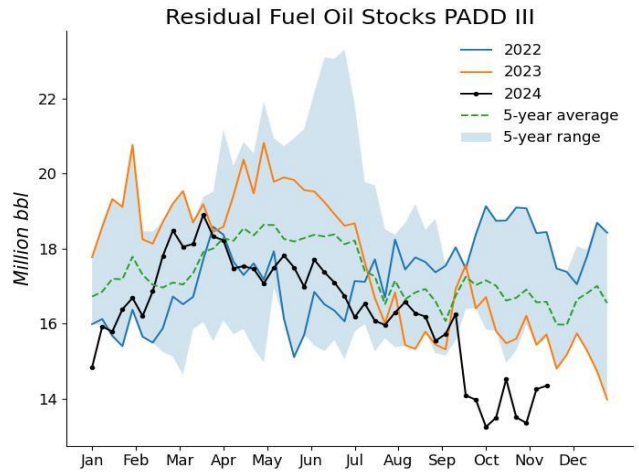
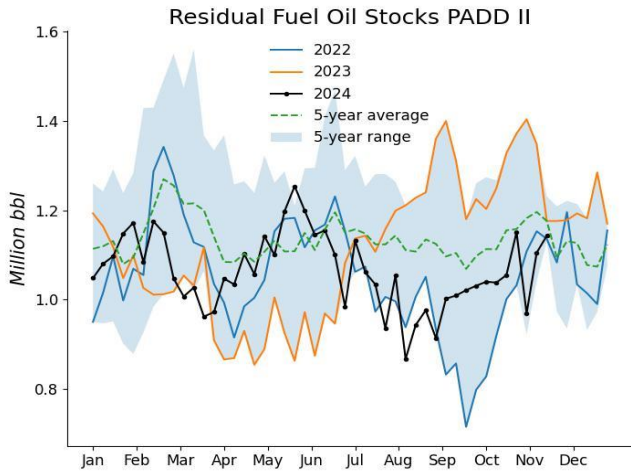
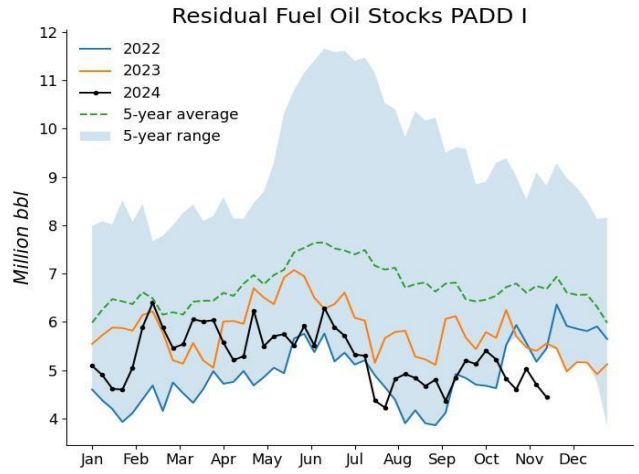
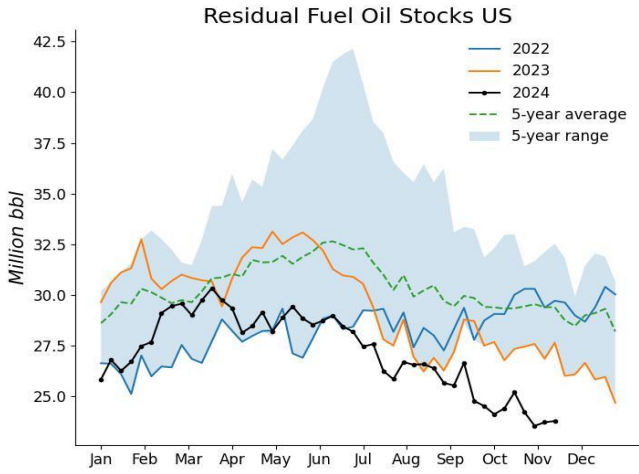
Sources: EIA, OGJ

Kerosene-Type Jet Fuel Stocks, Regional Details



Sources: EIA, OGJ

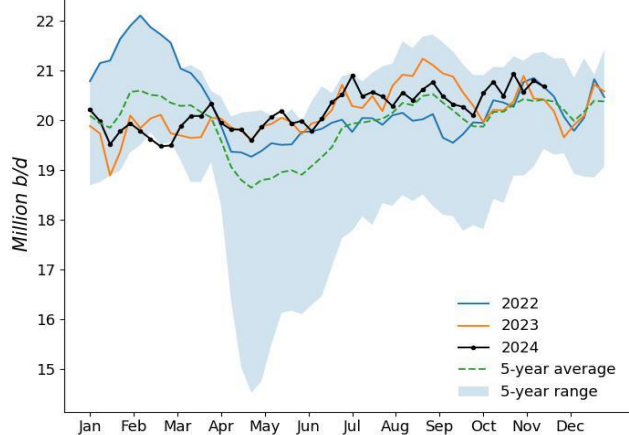
Residual Fuel Oil Stocks, Regional Details



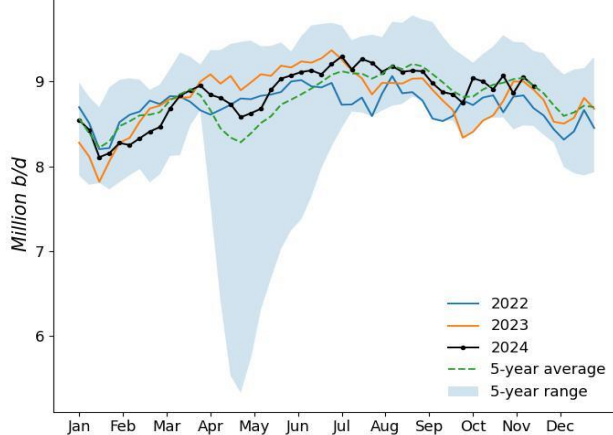
Sources: EIA, OGJ

Product Supplied

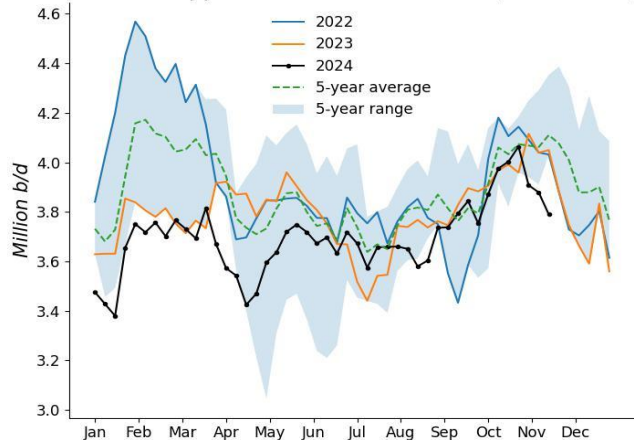
US Product Supplied of Petroleum Products (4 week ma)



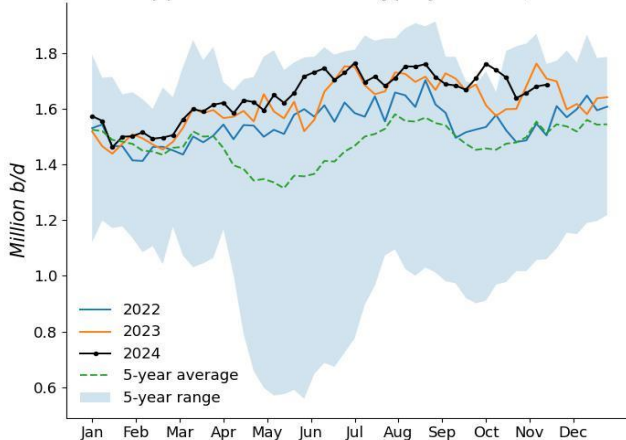
Product Supplied of Finished Motor Gasoline (4 week ma)



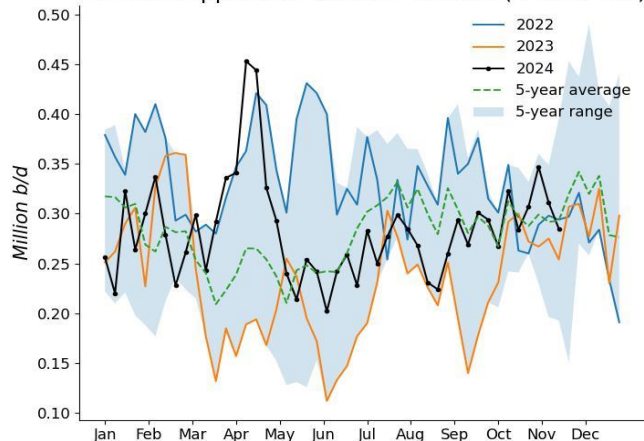
Product Supplied of Distillate Fuel Oil (4 week ma)



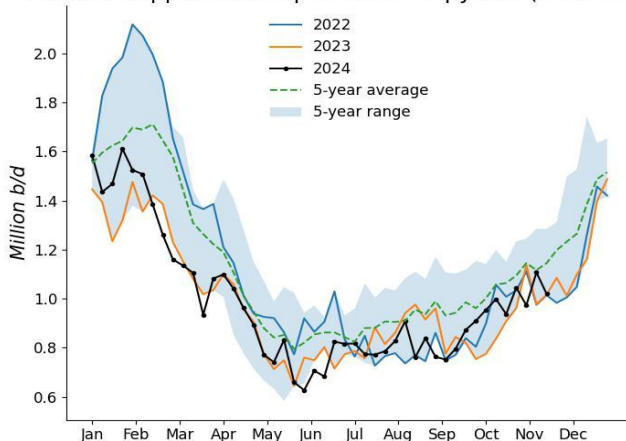
Product Supplied of Kerosene-Type Jet Fuel (4 week ma)



Product Supplied of Residual Fuel Oil (4 week ma)

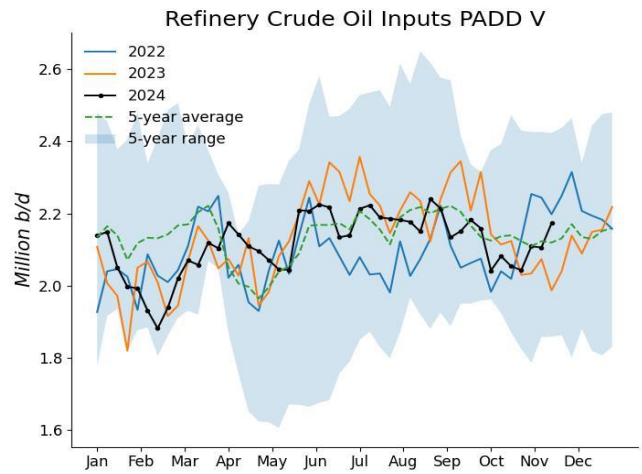
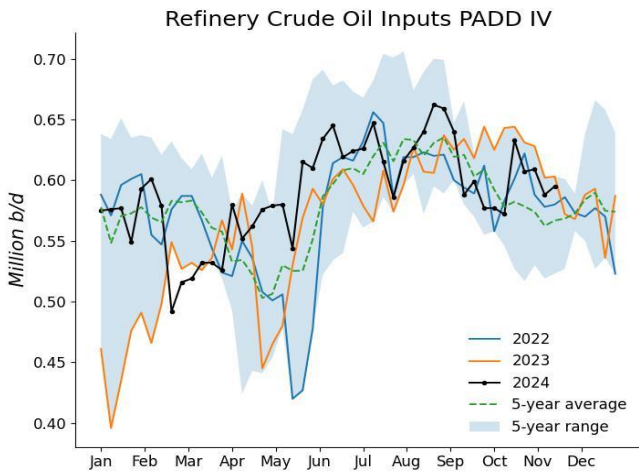
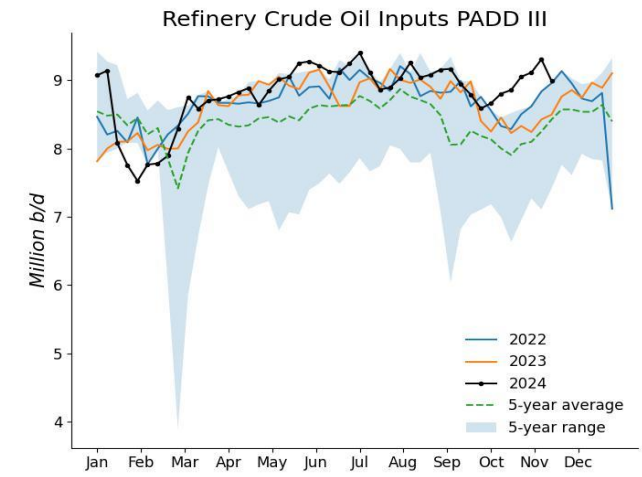
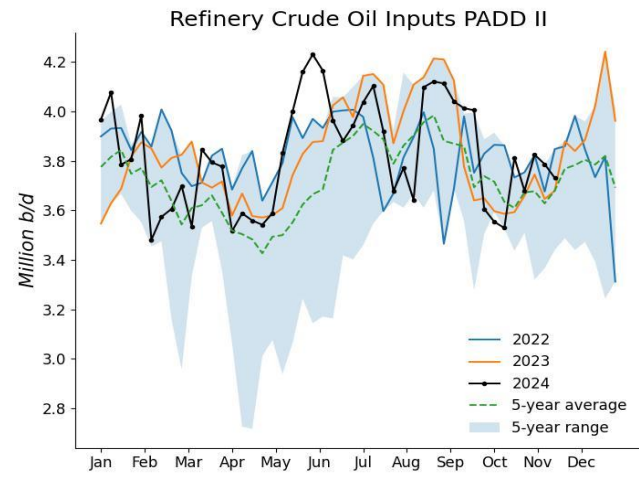
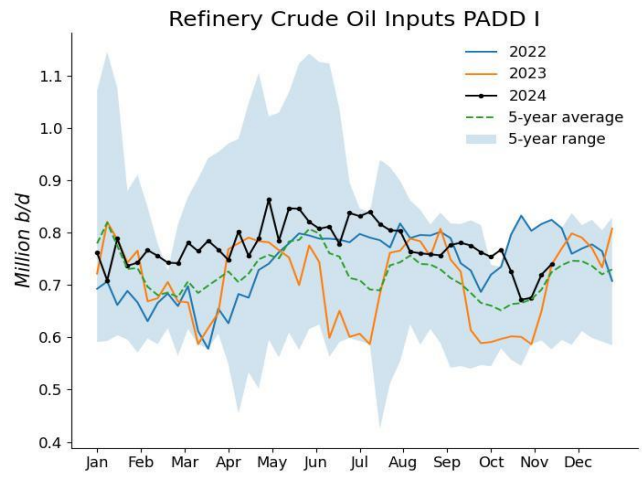
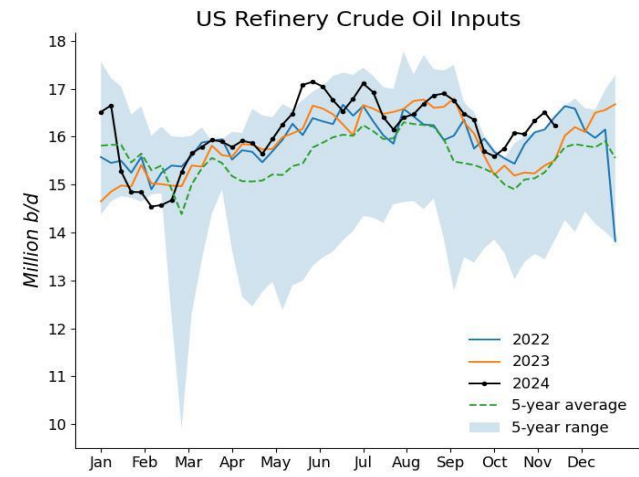


Product Supplied of Propane and Propylene (4 week ma)



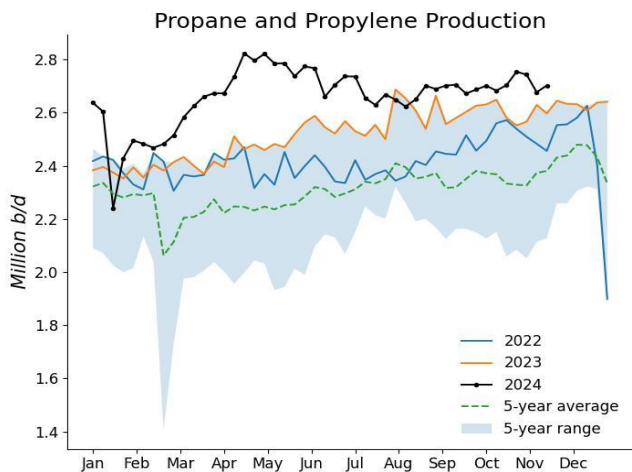
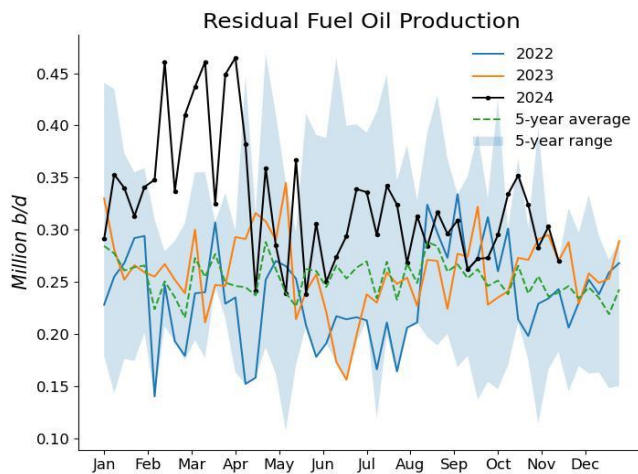
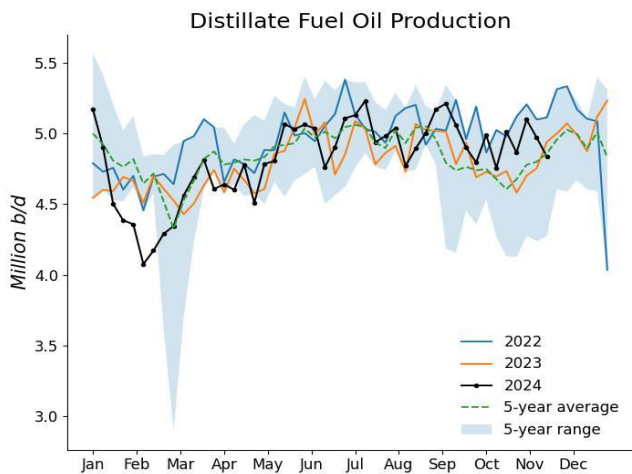
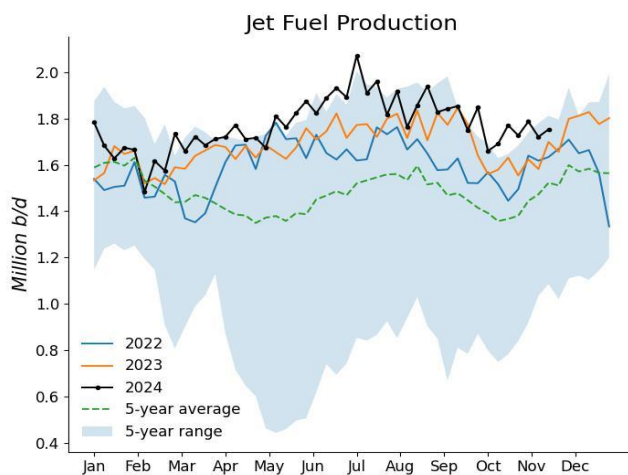
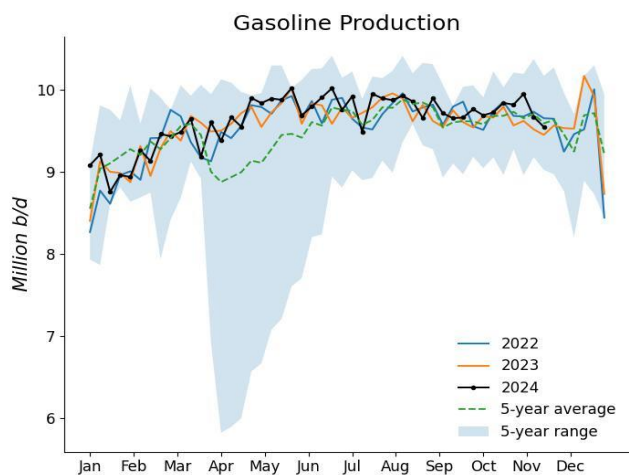
Sources: EIA, OGJ

Refinery Runs, Regional Details



Sources: EIA, OGJ

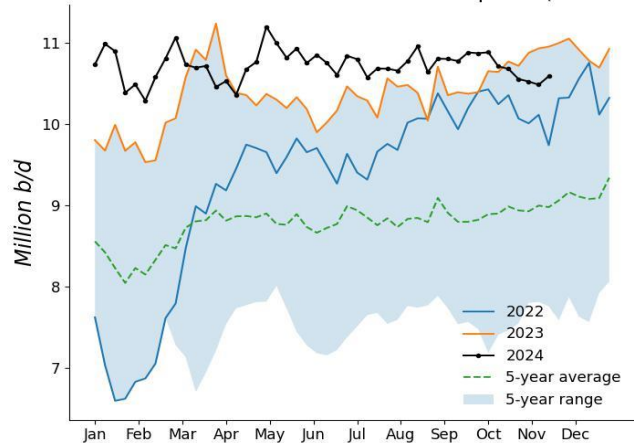
Refining Production



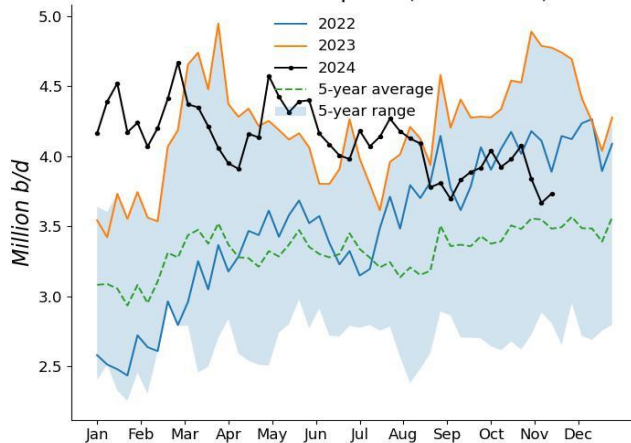
Sources: EIA, OGJ

Oil Exports

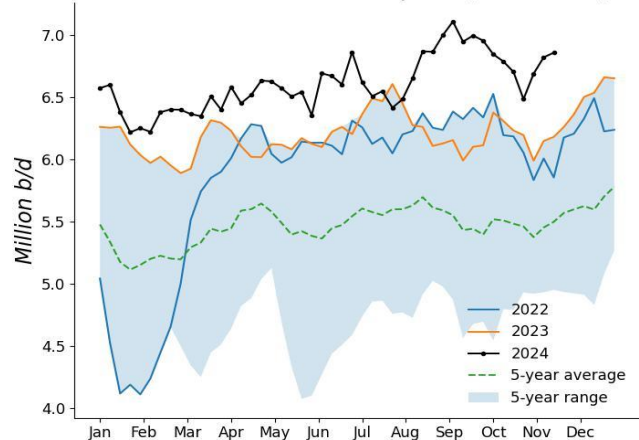
US Crude Oil and Petroleum Products Exports (4 week ma)



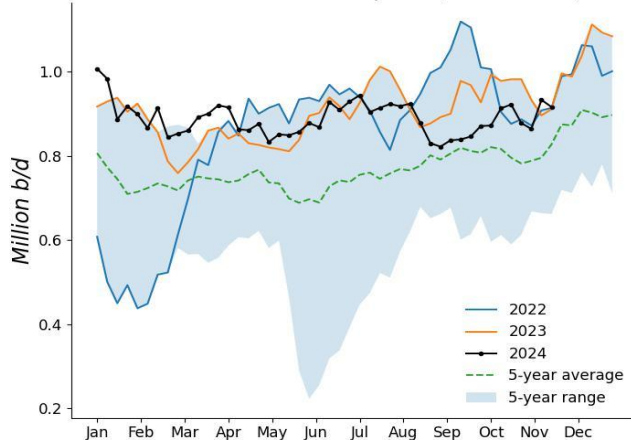
US Crude Oil Exports (4 week ma)



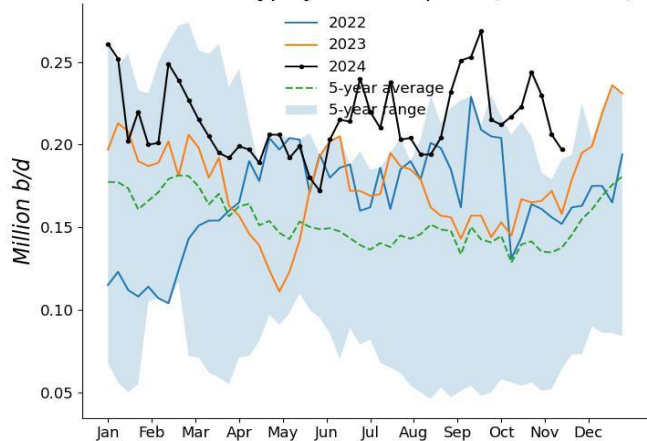
US Petroleum Products Exports (4 week ma)



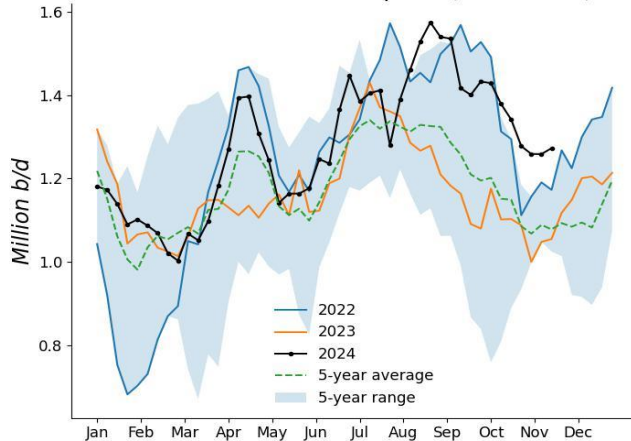
US Motor Gasoline Exports (4 week ma)

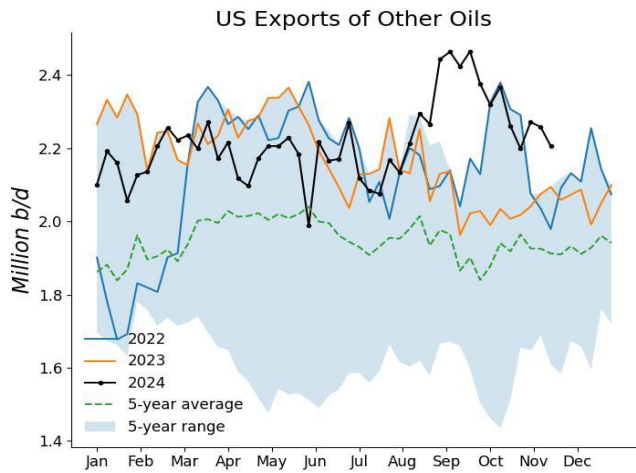
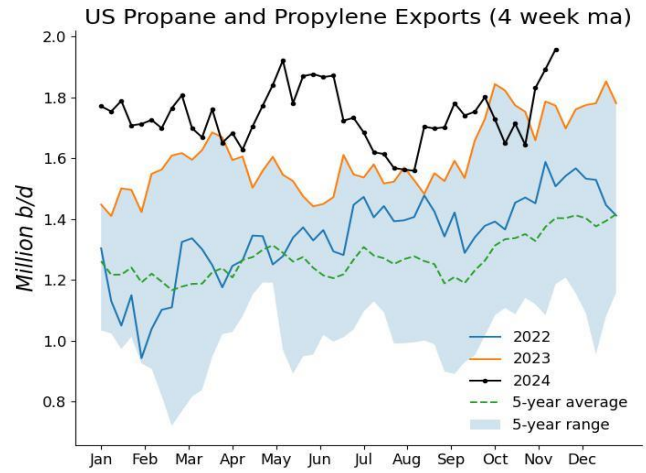
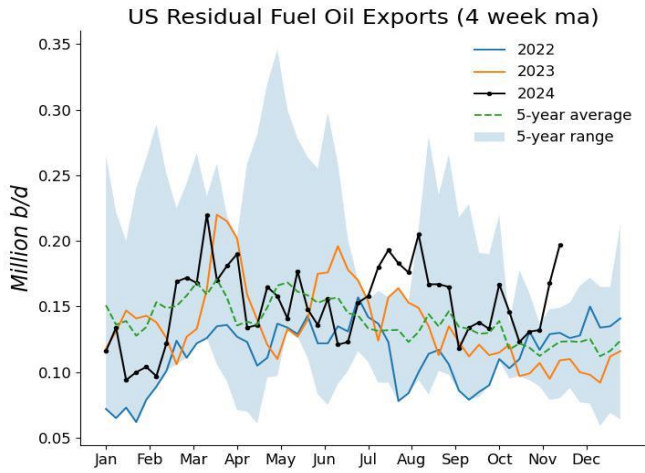


US Kerosene-Type Jet Fuel Exports (4 week ma)



US Distillate Fuel Oil Exports (4 week ma)

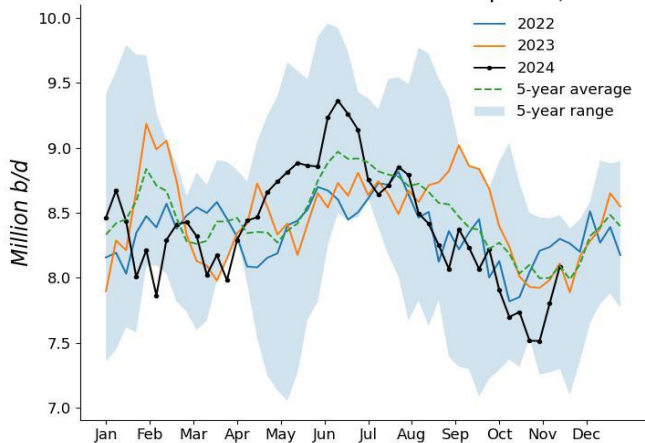




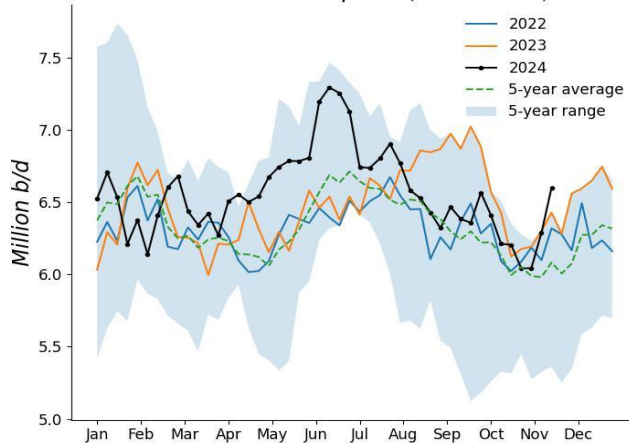
Sources: EIA, OGJ

Oil Imports

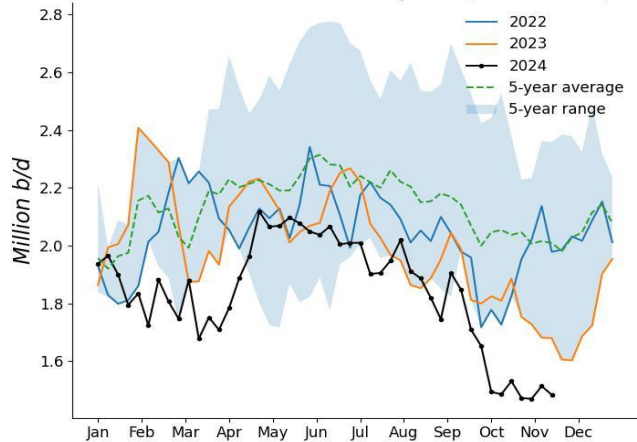
US Crude Oil and Petroleum Products Imports (4 week ma)



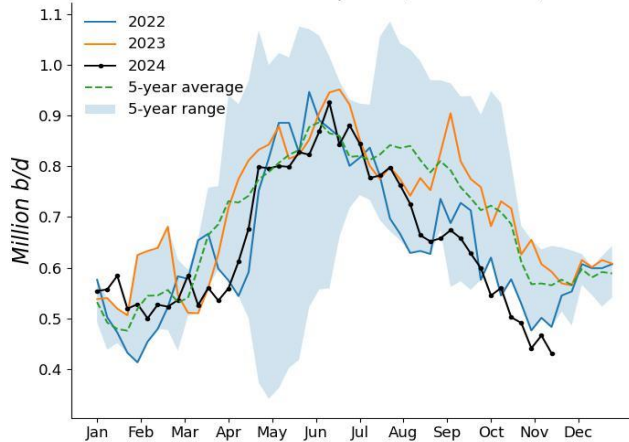
US Crude Oil Imports (4 week ma)



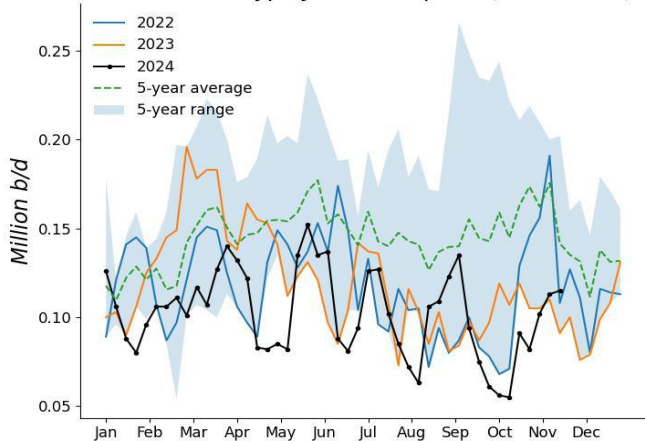
US Petroleum Products Imports (4 week ma)



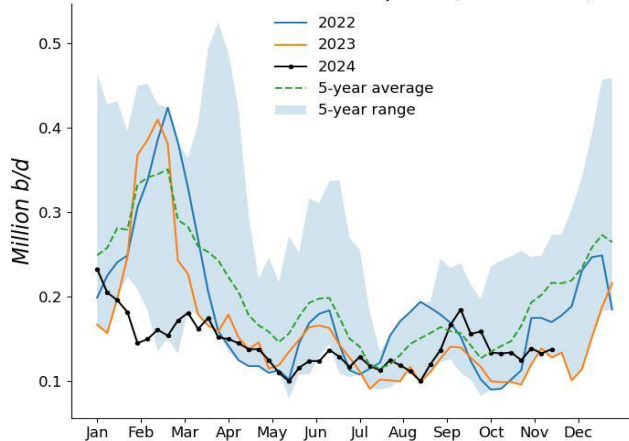
US Gasoline Imports (4 week ma)

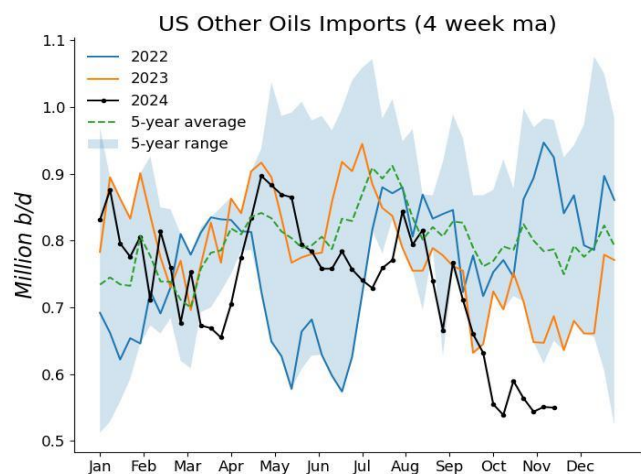
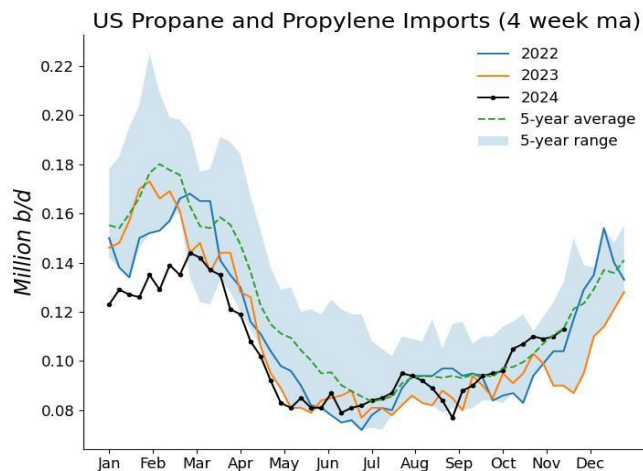
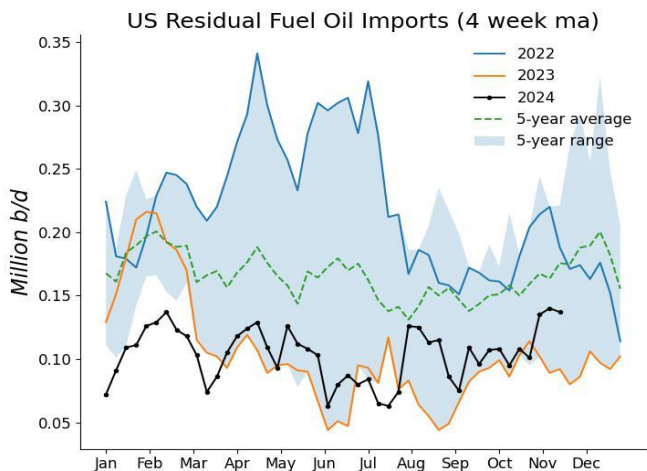


US Kerosene-Type Jet Fuel Imports (4 week ma)



US Distillate Fuel Oil Imports (4 week ma)

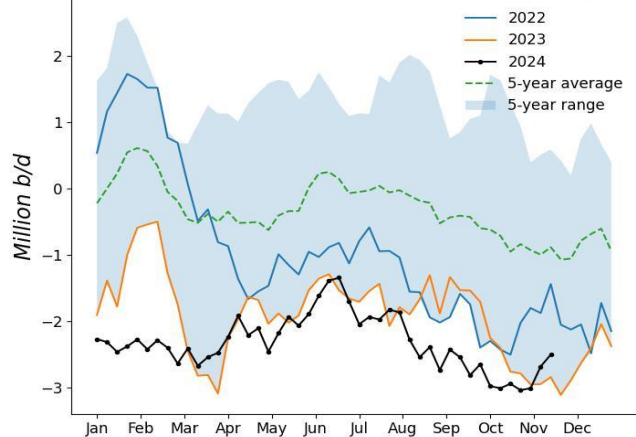




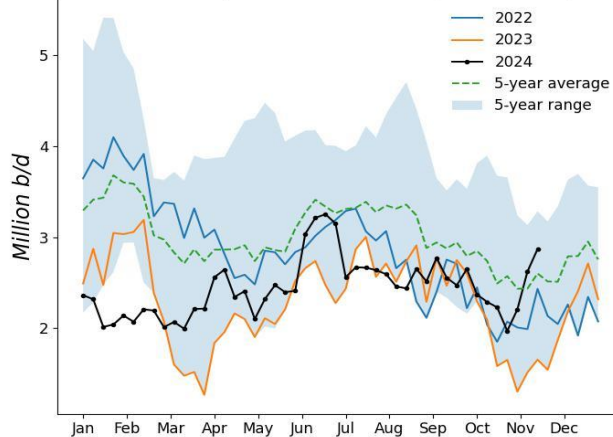
Sources: EIA, OGJ

Oil Net Imports

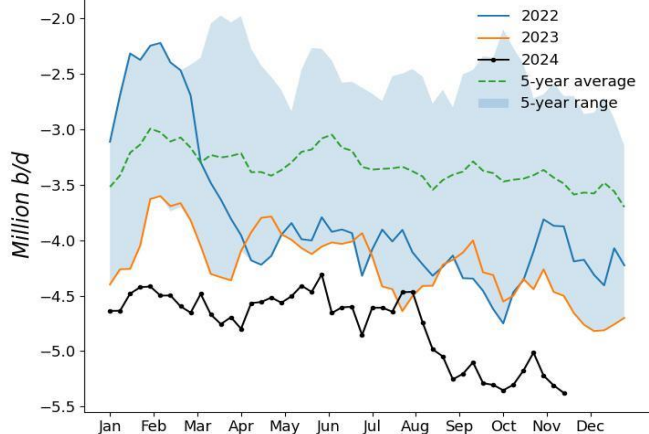
US Net Imports of Crude Oil and Petroleum Products (4 week ma)



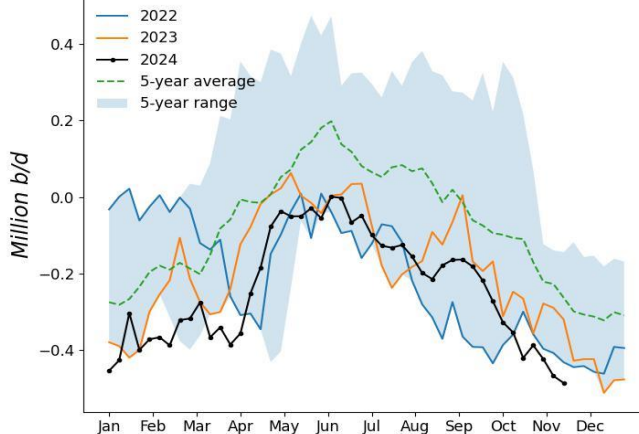
US Net Imports of Crude Oil (4 week ma)



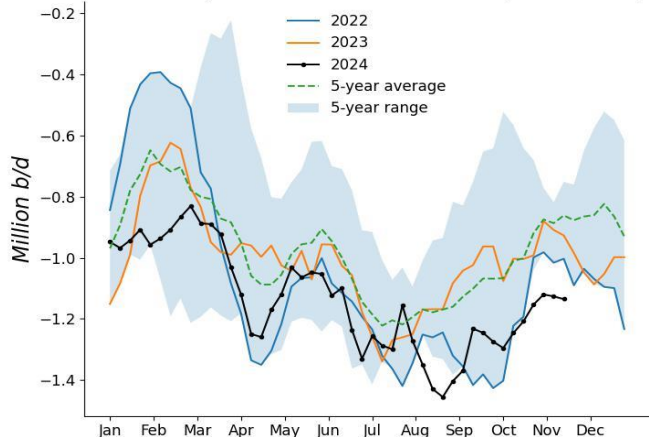
US Net Imports of Petroleum Products (4 week ma)



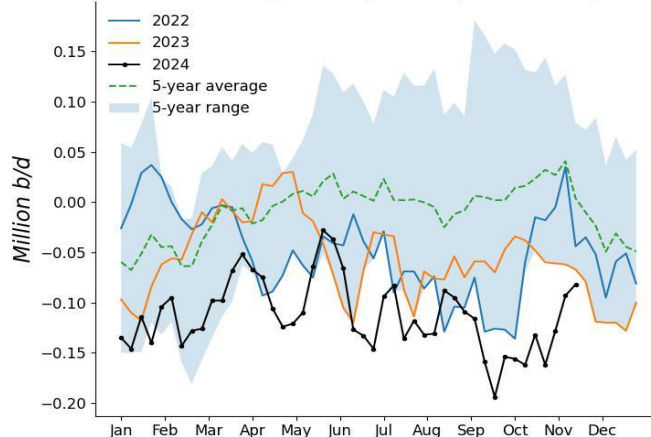
US Net Imports of Gasoline (4 week ma)



US Net Imports of Distillate Fuel Oil (4 week ma)

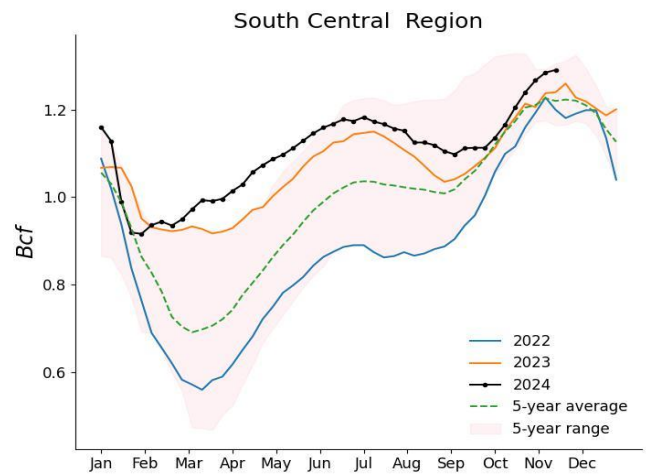
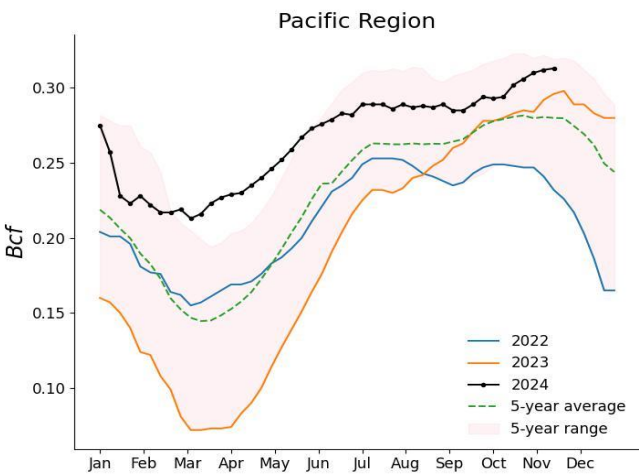
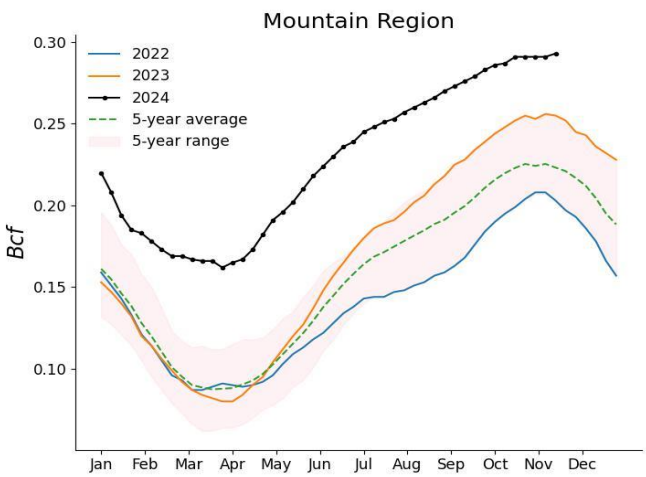
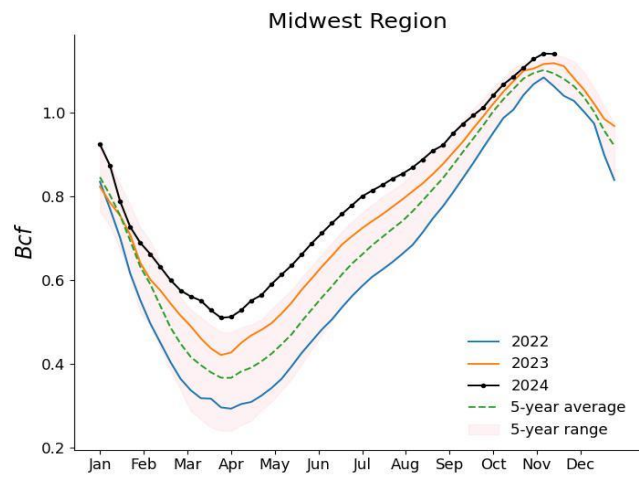
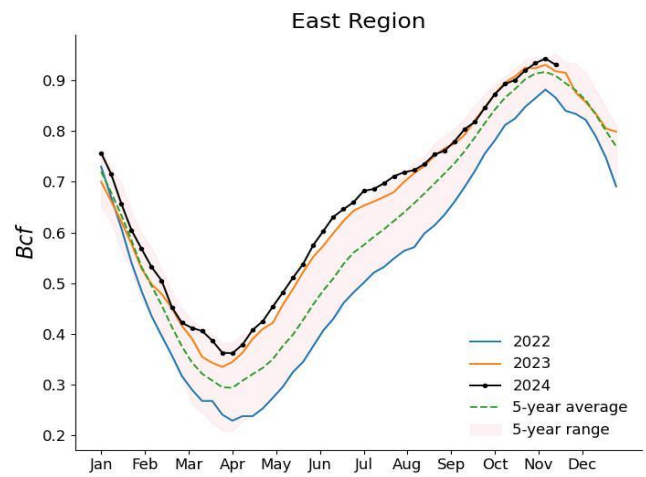
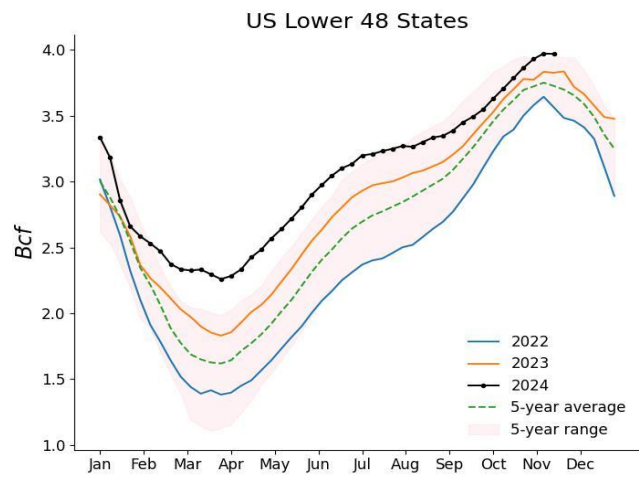


US Net Imports of Jet Fuel (4 week ma)



Sources: EIA, OGJ

Working Gas in Underground Storage, Regional Details



Sources: EIA, OGJ

Appendix

1, 4 week ma: 4 week moving average

2, Natural Gas Storage Regions:

East Region: Connecticut, Delaware, District of Columbia, Florida, Georgia, Massachusetts, Maryland, Maine, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia

Midwest Region: Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, Tennessee, and Wisconsin

Mountain Region: Arizona, Colorado, Idaho, Montana, Nebraska, New Mexico, Nevada, North Dakota, South Dakota, Utah, and Wyoming

Pacific Region: California, Oregon, and Washington

South Central Region: Alabama, Arkansas, Kansas, Louisiana, Mississippi, Oklahoma, and Texas

Disclosures

The content presented in this report relies on data sourced from deemed reliable channels. However, its accuracy is not guaranteed, and it should not be considered exhaustive. This report is exclusively intended for informational purposes and should not be used as the primary foundation for making investment decisions.