Month End Summary of Commodity Options

Intro:
We are pleased to welcome you to our March 2022 month end report.

March solidified our view that uncertainty was here to stay. There is much to look at this month. We start with interest rates.

The US Government rates started to move towards the realization that inflation is more permanent than transitory. The longer out the maturity term one goes, the bigger the futures dropped. Implied volatility was a bit weaker, but this hides the fact that though at the money vols were lower, the implied volatility skews' shapes changed dramatically. Call vols declined in the 30 Year market. Puts in the 10 Year strengthened. The Eurodollar contract showed a massive bid in vol at the 6 month mark.

The equity index products showed a massive rally in major indices. The Nasdaq-100 futures rallied by 6.2%. The VIX index plummeted by nearly 13 points or 38%. In most cases the vol skews showed much less convexity-suggestive that the market was much more calm. This is very hard to understand if one accepts the proposition that the Fed's hands might be tied.

The formerly sleepy foreign exchange market woke up dramatically. Generally, currencies associated with raw material and agricultural products rallied. The Brazillian Real did very well. The Canadian Dollar and Australian Dollar also did very well. The Yen suffered. The Japanese central bank's decision to buy all of the JGB's bonds aggressively has weakend the Yen. Yen vol exploded.

In agricultural commodities the big performers were oats, feeder cattle, corn, wheat and bean meal. The big losers were lumber (down 21%), bean oil and hogs. Except for feeder cattle, vol was mostly down across the board. To be fair, this is somewhat deceptive as there were large swings in vol over the month. The ghost lines (grayed out) should illustrate the intra month volatility.

Given the Russian demands for payment in Rubles or gold for their gas, you might have expected gold to rally. The COMEX contract was up only 0.5%. The big moves were in hot rolled steel (+45%), iron ore (+4.7%) and copper (+3.4%). Volatility was down 80% in hot rolled steel and up 77% in iron ore. The relative peacefulness of palladium and platinum, both of which are sourced in large amounts from Russia, is hard to understand, perhaps industrial consumers have large domestic stockpiles.

Energy was a mixed bag. Again the intramonth moves are hidden by a great deal of mean reversion. Natural gas saw a massive rise of 23.4%-on stronger vol. The OH contract saw a massive increase in vol of 0.21 which translates into a 38% move. The refined gasoline contract's vol increased by 32%. The ethanol contract's vol also rose spectacularly. WTI and Brent contracts did not show much month to month change.

As always we welcome you to visit our website and hope to help you manage risk!

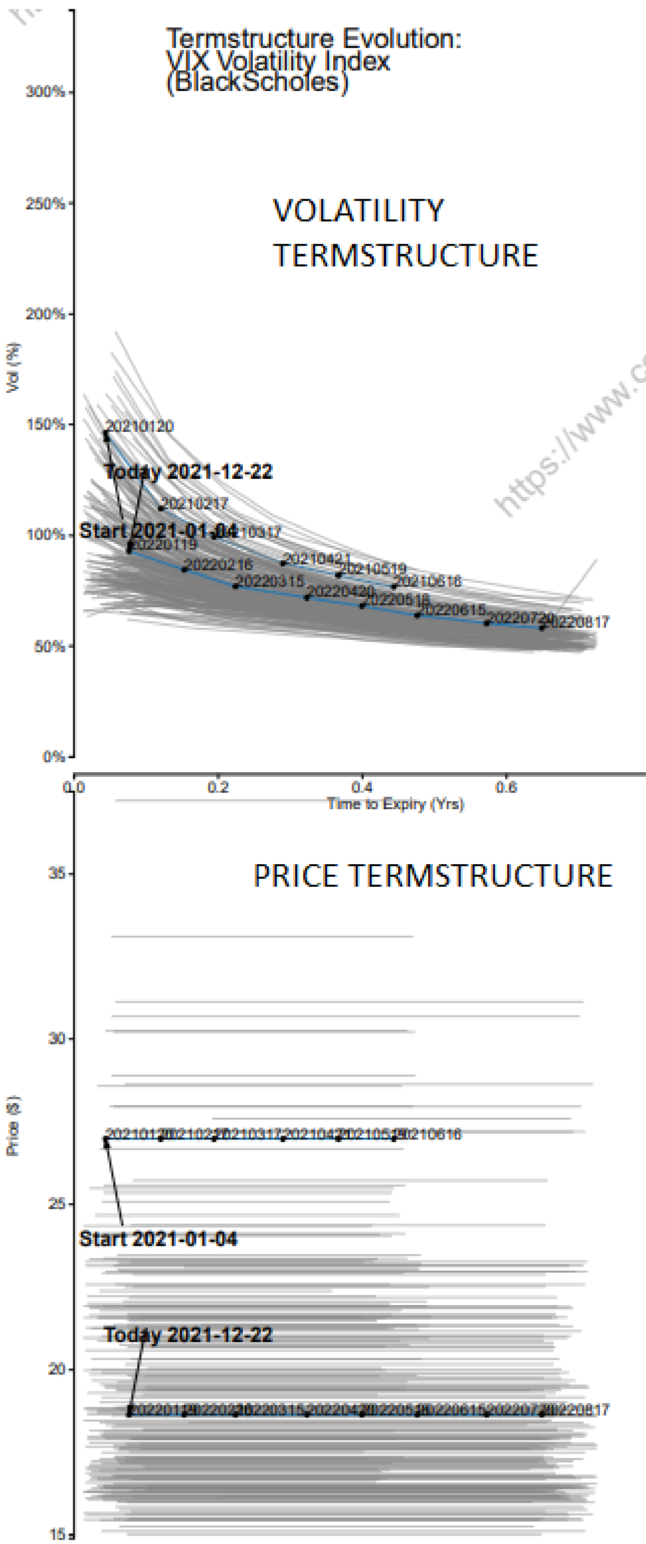
CommodityVol.com is here to serve your needs around modeling, forecasting and understanding the market. If you have needs for commodity skews, parameterized surfaces (including stochastic volatility models), please do not hesitate to contact us! info@commodityvol.com

Explanation:

The document is composed of two parts. There is a tabular portion which summarizes the changes in front month futures prices and the changes in the at the money front month implied volatility. The results are presented as raw differences and percentage changes. The plots in this document try to give a feel for the evolution of the futures and options for each product type. The skew/termstructure/xyplots are broken out by major asset classes: Indexes, Fixed Income and so on.

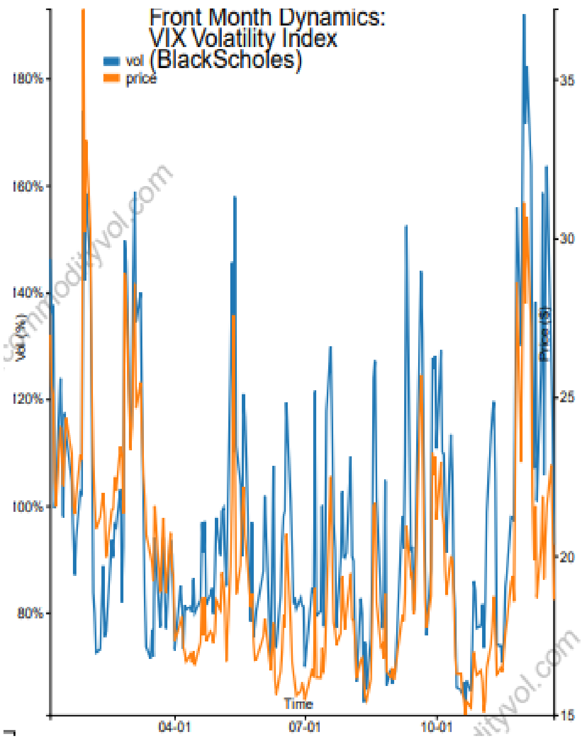
At the Money Volatilty and Price Term Structures:

Stacked on top of the other on the left hand side, see the termstructures of vol and the (underlying) futures contract price.



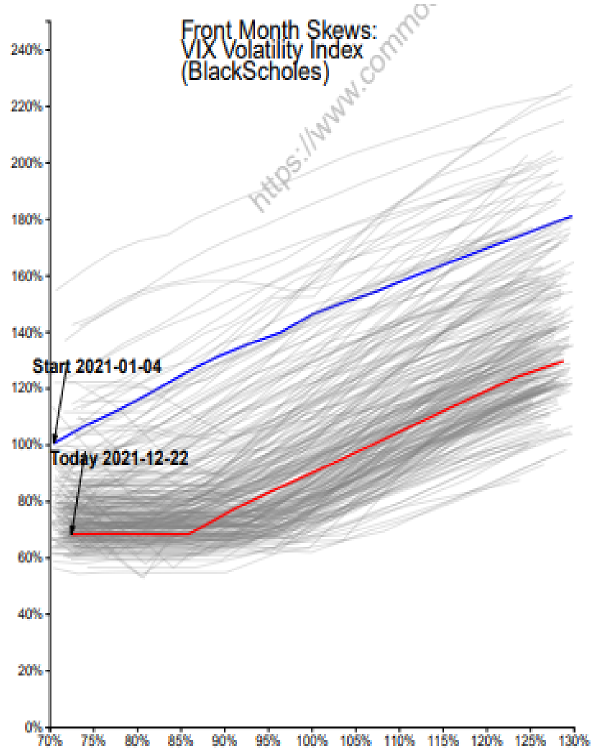
The starting curve is the termstructure at the beginning of the period. This curve is labelled start and is typically colored blue. The ending curve is typically colored red and denoted by the text: Today. The greyed out lines are the termstructures for each day of the period. The hope is that the range of movements becomes apparent.

Front Month At the Money Volatilty and Front Month Price Over the Year:
On the right hand panel we have the price and implied volatility of the front month contract.



At the money implied volatility is shown in blue and the axis on the left should be used to read off the values. The front month futures price is in orange and the right hand axis is where its value can be read.

Front Month Skew:
On the right hand in the bottom panel we have the starting front month skew and the ending front month skew.



The front month skew is shown for the starting date. The starting curve is labelled as 'Start' and captioned with the date. The starting curve is blue. Conversely, the ending curve is shown in red and labeled Today. The y-axis shows the implied volatility and the x-axis shows the moneyness. The moneyness is a way to normalize the skew so that it is comparable across time.

At The Money Roundup of Products

exch/prod	desc	futures chng [%]	vol chng [%]
CBT/26	2 YR US Treasury Note	-1.926 [-1.8%]	-0.007 [-24.6%]
CBT/25	5 YR US Treasury Note	-4.500 [-3.8%]	-0.007 [-12.6%]
CBT/21	10 YR US Treasury Note	-5.859 [-4.6%]	-0.010 [-12.8%]
CBT/17	30 YR US Treasury Bond	-9.094 [-5.7%]	-0.013 [-9.8%]
CME/ED	Eurodollar	-0.898 [-0.9%]	-0.001 [-10.2%]
CBT/UBE	Long Term US Treasury Bond	-11.469 [-6.1%]	+0.001 [+0.4%]

EquityIndex

exch/prod	desc	futures chng [%]	vol chng [%]
CBT/YM	E-Mini Dow	+1351.000 [+4.1%]	-0.102 [-36.9%]
CME/NQ	E-Mini Nasdaq	+863.250 [+6.2%]	-0.109 [-30.5%]
CME/RTO	E-Mini Russell 2000	+59.700 [+3.0%]	-0.120 [-32.8%]
CME/RTM	E-Mini Russell EOM	+62.600 [+3.1%]	-0.108 [-31.0%]
CME/ES	E-Mini S&P 500	+227.000 [+5.3%]	-0.120 [-38.4%]
CBOE/VIX	VIX Volatility Index	-12.760 [-38.3%]	-0.737 [-41.6%]

Forex

exch/prod	desc	futures chng [%]	vol chng [%]
CME/ADU	AUDUSD 2pmfix	+0.024 [+3.3%]	-0.008 [-6.8%]
CME/BTC	Bitcoin	+1495.000 [+3.4%]	-0.123 [-18.1%]
CME/BR	BRLUSD Monthly	+0.019 [+10.1%]	-0.000 [-0.2%]
CME/CAU	CADUSD 2pmfix	+0.016 [+2.0%]	-0.003 [-4.3%]
CME/CHU	CHFUSD 2pmfix	-0.006 [-0.5%]	-0.005 [-6.1%]
CME/EUU	EURUSD 2pmfix	-0.006 [-0.6%]	-0.016 [-16.1%]
CME/GBU	GBPUSD 2pmfix	-0.018 [-1.3%]	-0.010 [-11.2%]
CME/JPU	JPYUSD 2pmfix	-0.000 [-5.6%]	+0.027 [+34.2%]
CME/MP	Mexican Peso	+0.002 [+4.6%]	-0.025 [-20.6%]
CME/NE	New Zealand	+0.019 [+2.8%]	+0.031 [+31.1%]

Ags

exch/prod	desc	futures chng [%]	vol chng [%]
CME/DK	Class IV Milk	+0.380 [+1.5%]	-0.045 [-38.0%]
CBT/C	Corn	+0.230 [+3.2%]	-0.148 [-31.1%]
CME/62	Feeder Cattle	+5.125 [+3.3%]	+0.019 [+13.0%]
CBT/KW	KC HRW Wheat	+0.268 [+2.7%]	-0.383 [-46.9%]
CME/LN	Lean Hog	-4.450 [-4.2%]	-0.135 [-43.2%]
CME/48	Live Cattle	-3.400 [-2.4%]	-0.031 [-18.0%]
CME/LB	Lumber110	-258.400 [-21.1%]	-0.215 [-27.3%]
CME/NF	Nonfat Dry Milk	+1.500 [+0.8%]	-0.001 [-1.6%]
CBT/O	Oats	+0.513 [+7.6%]	+0.033 [+8.8%]
CBT/14	Rough Rice	-0.175 [-1.1%]	-0.016 [-10.2%]
CBT/S	Soybean	-0.717 [-4.2%]	-0.089 [-28.7%]
CBT/06	Soybean Meal	+13.200 [+2.9%]	-0.083 [-24.3%]
CBT/07	Soybean Oil	-6.270 [-8.2%]	-0.115 [-25.9%]
CBT/W	Wheat	+0.220 [+2.2%]	-0.206 [-30.8%]

Metals

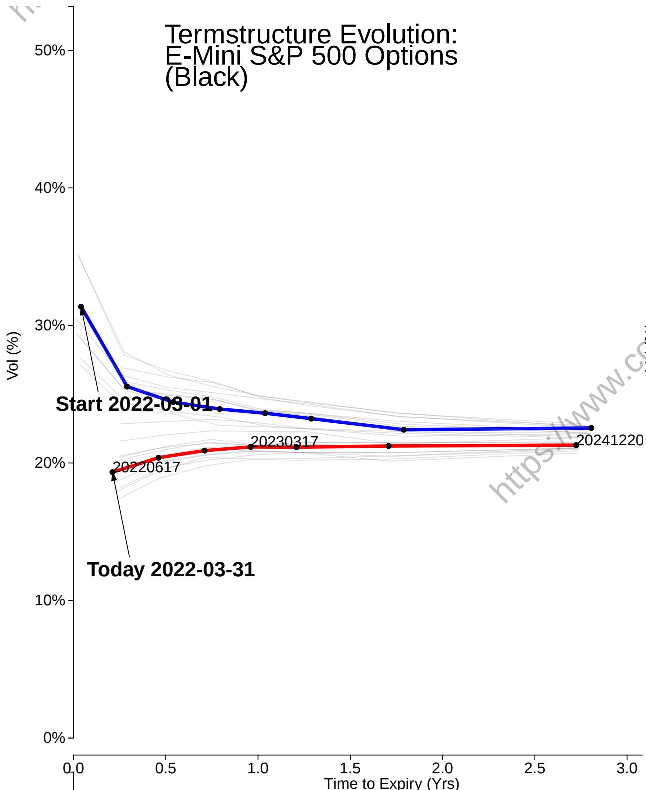
exch/prod	desc	futures chng [%]	vol chng [%]
COMEX/HX	Copper	+0.155 [+3.4%]	-0.018 [-6.1%]
COMEX/OG	Gold	+10.200 [+0.5%]	-0.038 [-18.3%]
COMEX/ICT	Iron Ore 62% Fe	+6.690 [+4.7%]	+0.284 [+77.6%]
NYMEX/PAO	Palladium	-282.200 [-11.1%]	+0.050 [+9.7%]
NYMEX/PO	Platinum	-56.100 [-5.3%]	-0.003 [-0.9%]
COMEX/SO	Silver	-0.408 [-1.6%]	-0.036 [-11.8%]
COMEX/HRO	Us. Midwest Domestic Hot-rolled Coil Steel (CRU) Index Average Price	+481.000 [+45.4%]	-0.208 [-80.1%]

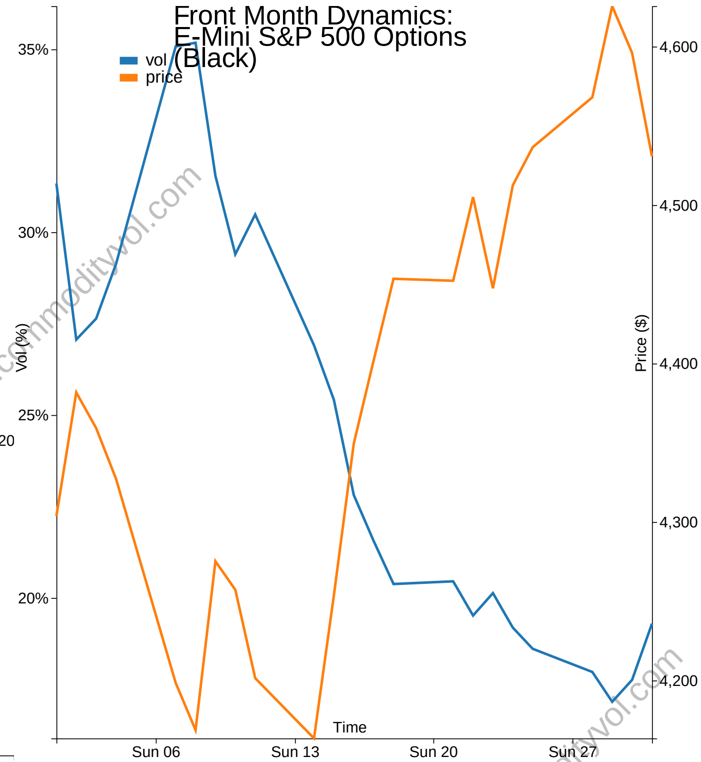
Energy

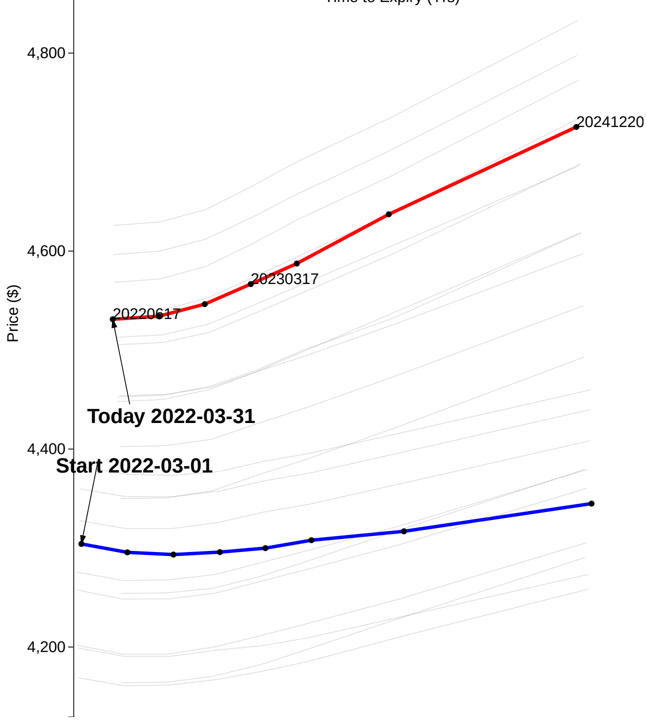
exch/prod	desc	futures chng [%]	vol chng [%]
NYMEX/BZO	Brent Crude Oil Margin	-0.260 [-0.2%]	-0.049 [-7.6%]
NYMEX/BE	Brent Euro Style	-0.260 [-0.2%]	+0.005 [+0.9%]
NYMEX/CVR	Chicago Ethanol(platts) Average Price	-0.045 [-1.8%]	+0.070 [+39.7%]
NYMEX/LO	Crude Oil	-3.130 [-3.0%]	-0.051 [-7.5%]
NYMEX/TFO	Dutch TTF Natural Gas	+4.232 [+3.5%]	-0.190 [-8.8%]
NYMEX/LN	European Natural Gas	+1.069 [+23.4%]	+0.020 [+3.6%]
NYMEX/E7	Henry Hub Financial Last Day	+1.069 [+23.4%]	+0.041 [+7.6%]
NYMEX/ON	Natural Gas	+1.069 [+23.4%]	+0.018 [+3.4%]
NYMEX/OH	NY Harbor ULSD	+0.210 [+6.7%]	+0.218 [+38.5%]
NYMEX/OB	RBOB	+0.062 [+2.0%]	+0.164 [+32.8%]

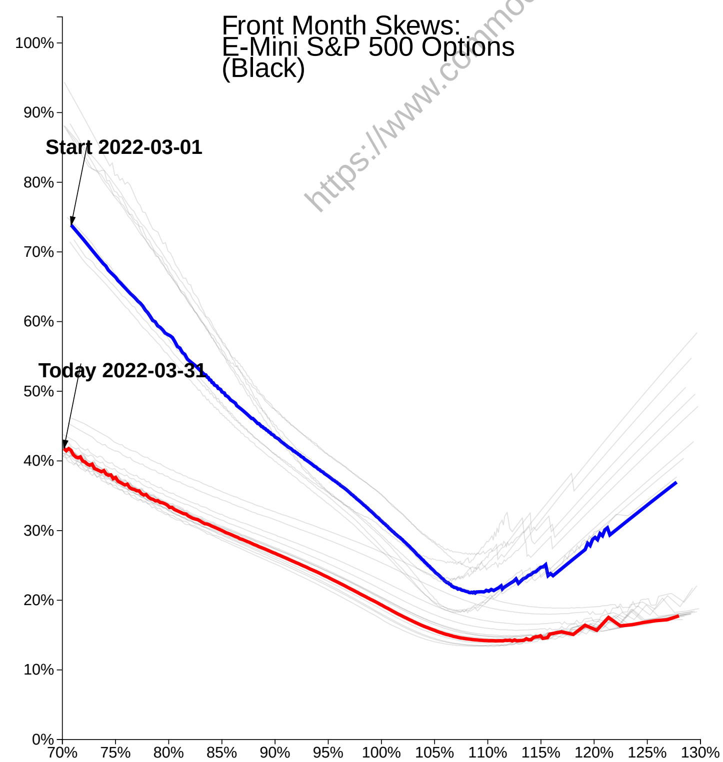
Skews, Termstructures and more

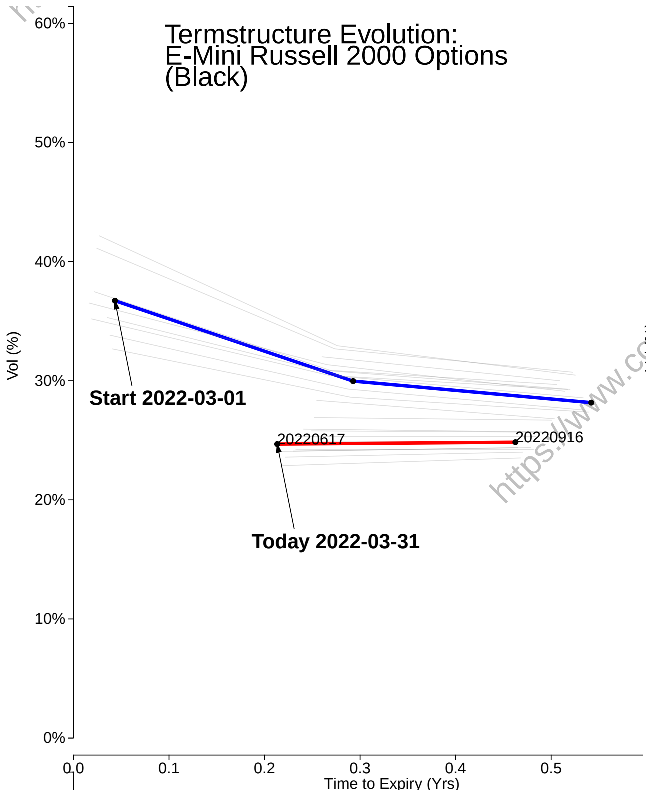
Equity Index

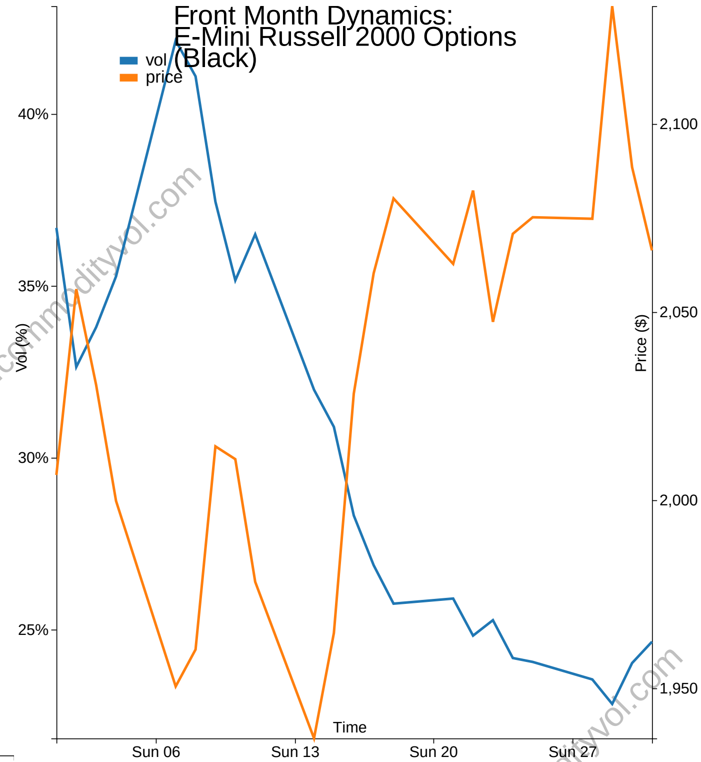

Termstructure Evolution:
E-Mini S&P 500 Options
(Black)
Vol (%)
50%
40%
30%
20%
10%
0%
Start 2022-03-01
Today 2022-03-31
20220617
20230317
20241220
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Time to Expiry (Yrs)

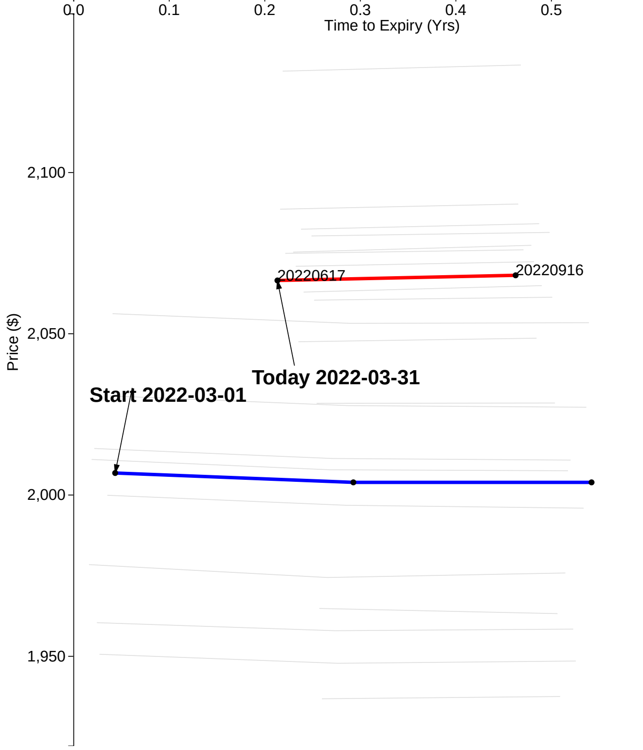

Front Month Dynamics:
E-Mini S&P 500 Options
(Black)
vol
price
Vol (%)
Price ($)
35%
30%
25%
20%
4,600
4,500
4,400
4,300
4,200
Time
Sun 06
Sun 13
Sun 20
Sun 27
https://www.commodityvol.com

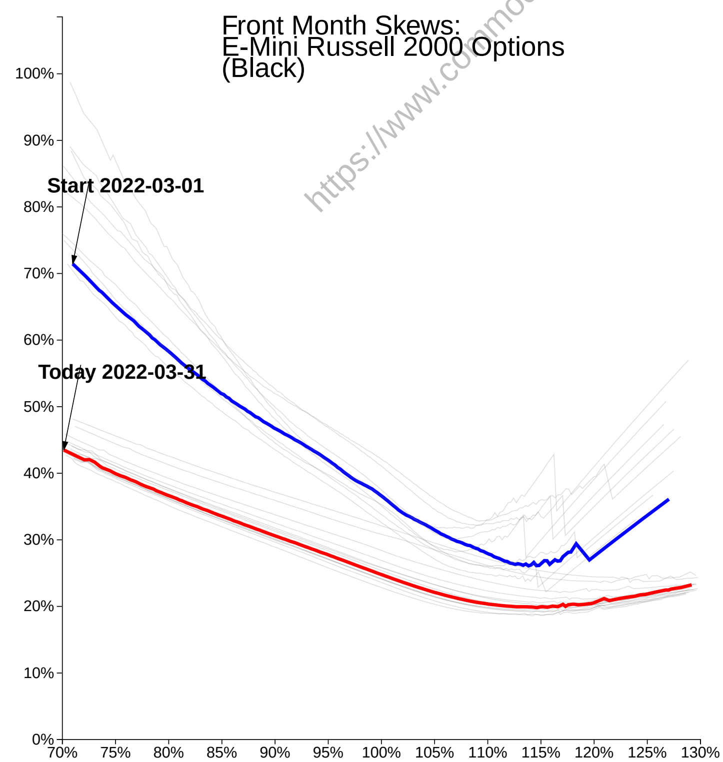

Price ($)
4,800
4,600
4,400
4,200
20241220
20230317
20220617
Today 2022-03-31
Start 2022-03-01

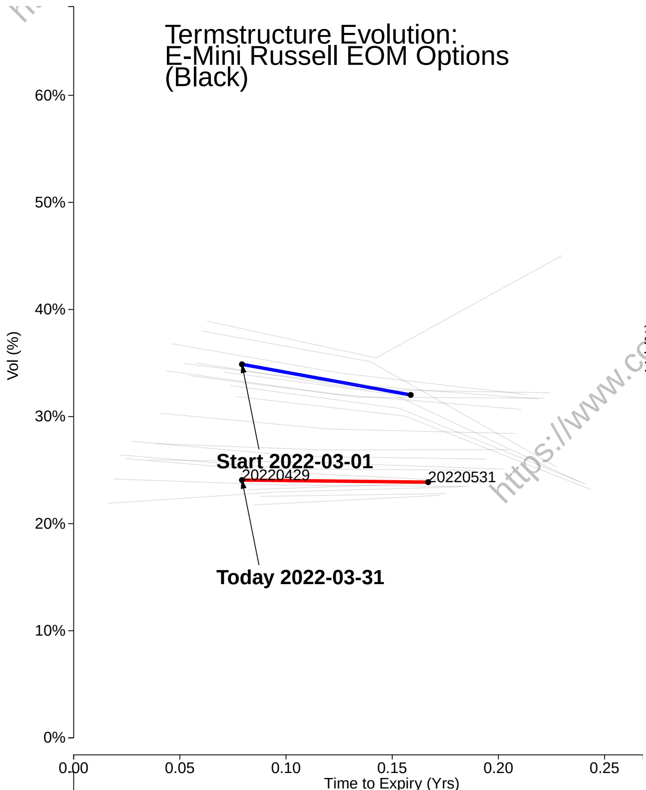

Front Month Skews:
E-Mini S&P 500 Options
(Black)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Start 2022-03-01
Today 2022-03-31
70%
75%
80%
85%
90%
95%
100%
105%
110%
115%
120%
125%
130%
https://www.commodityvol.com

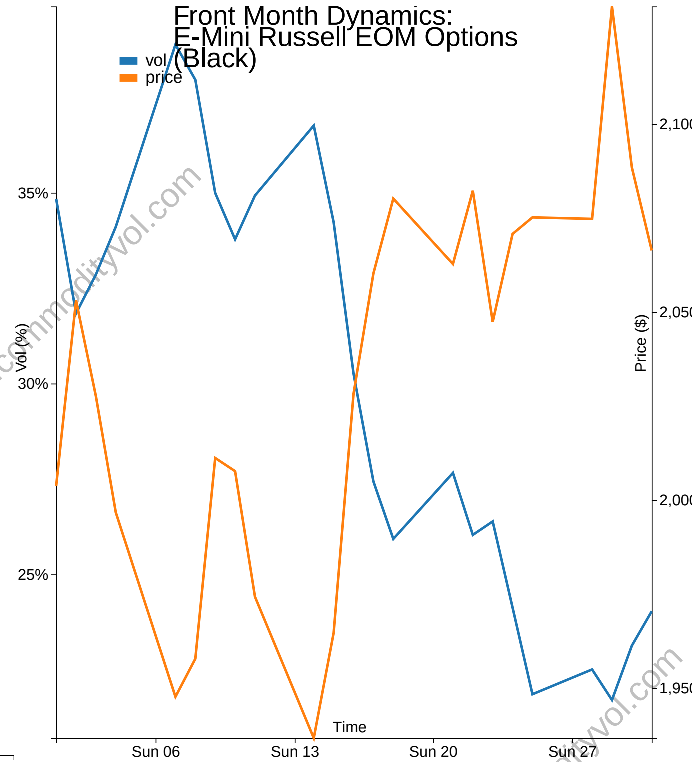

Termstructure Evolution:
E-Mini Russell 2000 Options
(Black)
Vol (%)
Time to Expiry (Yrs)
Start 2022-03-01
Today 2022-03-31
20220617
20220916

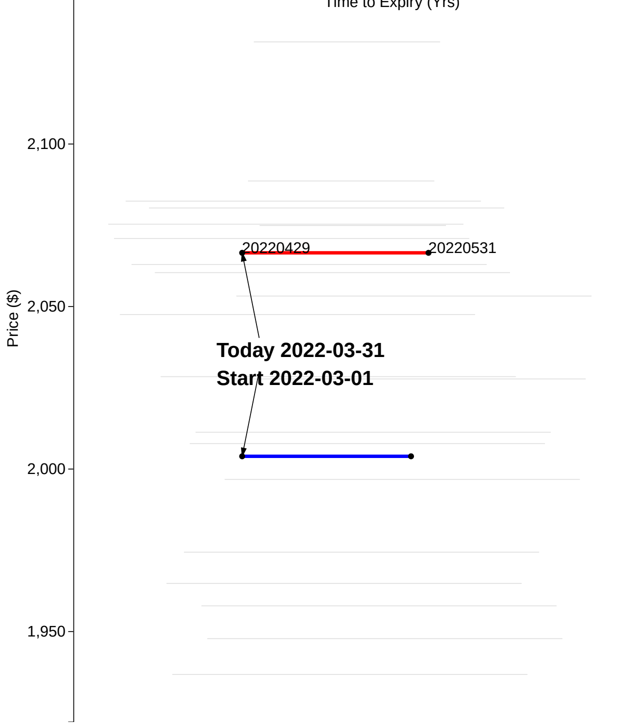

Front Month Dynamics:
E-Mini Russell 2000 Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

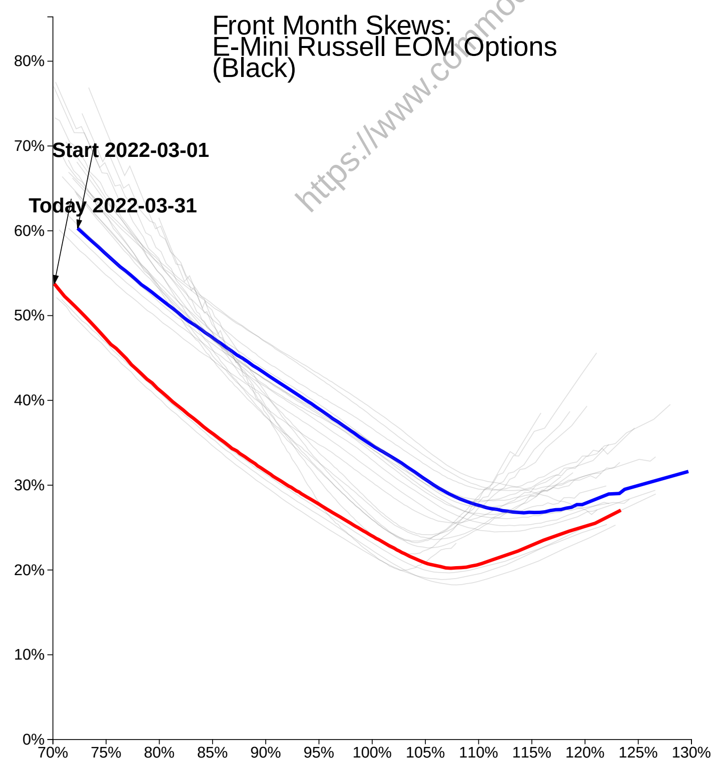

Price ($)
Start 2022-03-01
Today 2022-03-31
20220617
20220916

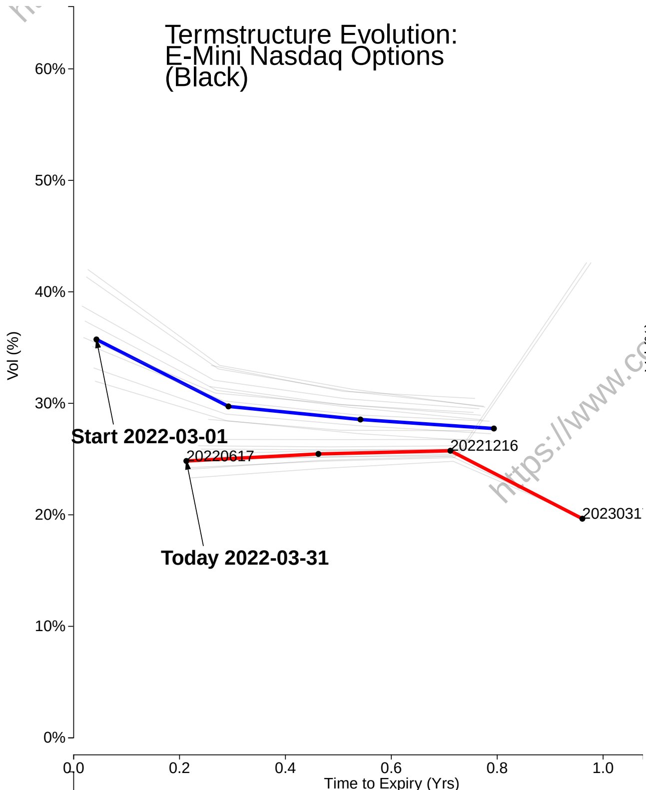

Front Month Skews:
E-Mini Russell 2000 Options
(Black)
Start 2022-03-01
Today 2022-03-31


Termstructure Evolution:
E-Mini Russell EOM Options
(Black)
Vol (%)
Time to Expiry (Yrs)
Start 2022-03-01
Today 2022-03-31
20220429
20220531

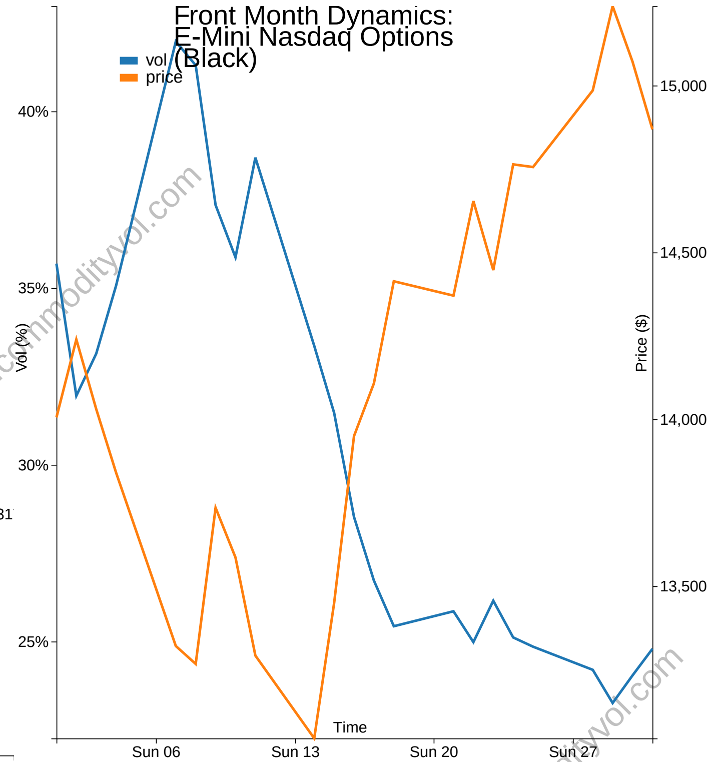

Front Month Dynamics:
E-Mini Russell EOM Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27


Price ($)
20220429
20220531
Today 2022-03-31
Start 2022-03-01

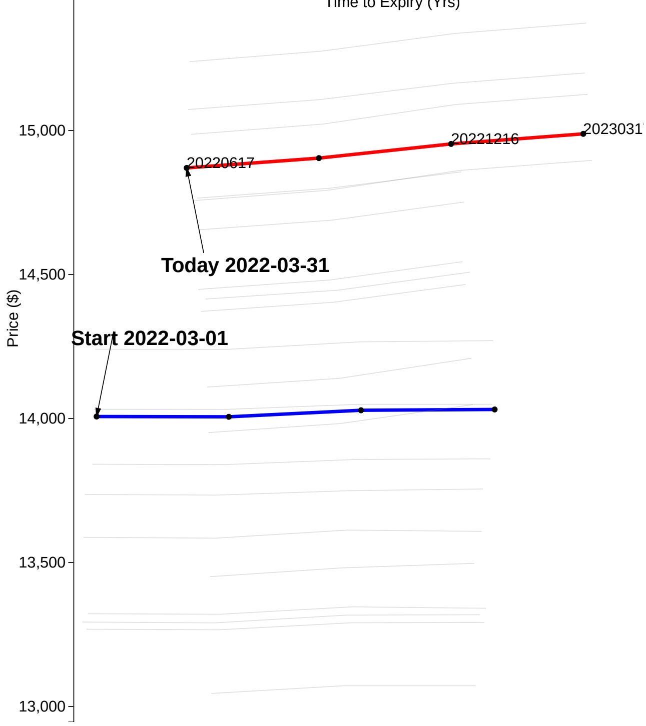

Front Month Skews:
E-Mini Russell EOM Options
(Black)
Start 2022-03-01
Today 2022-03-31



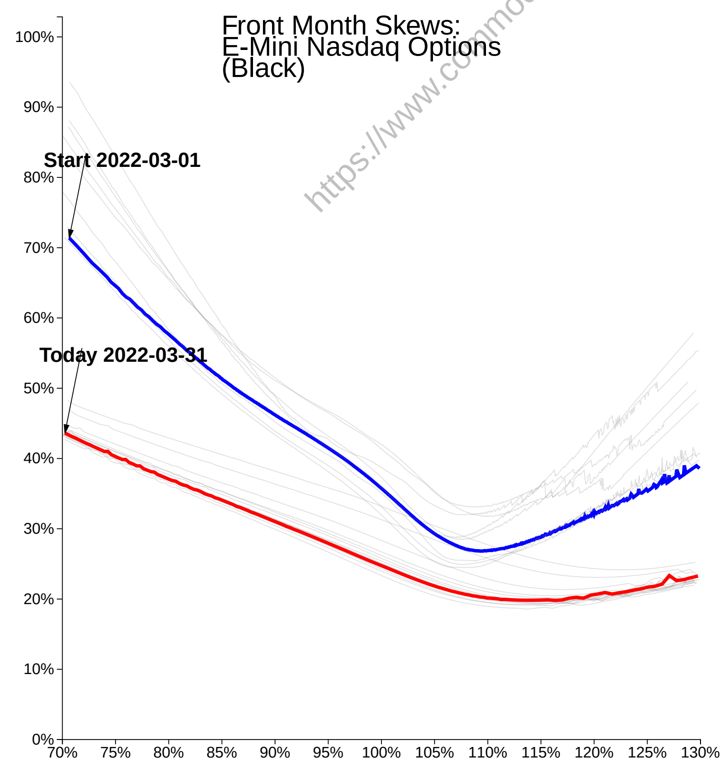
Termstructure Evolution:
E-Mini Nasdaq Options
(Black)
Vol (%)
Time to Expiry (Yrs)
Start 2022-03-01
Today 2022-03-31
20220617
20221216
2023031



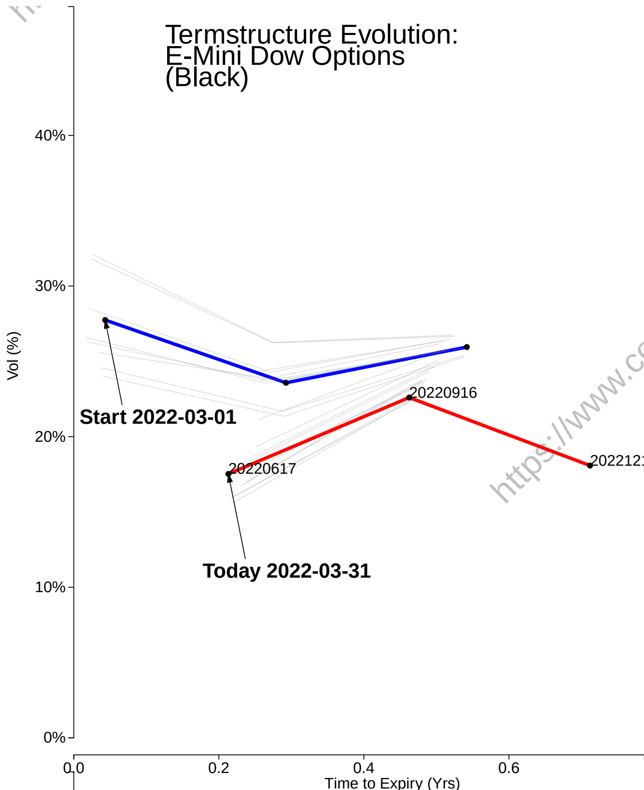
Front Month Dynamics:
E-Mini Nasdaq Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

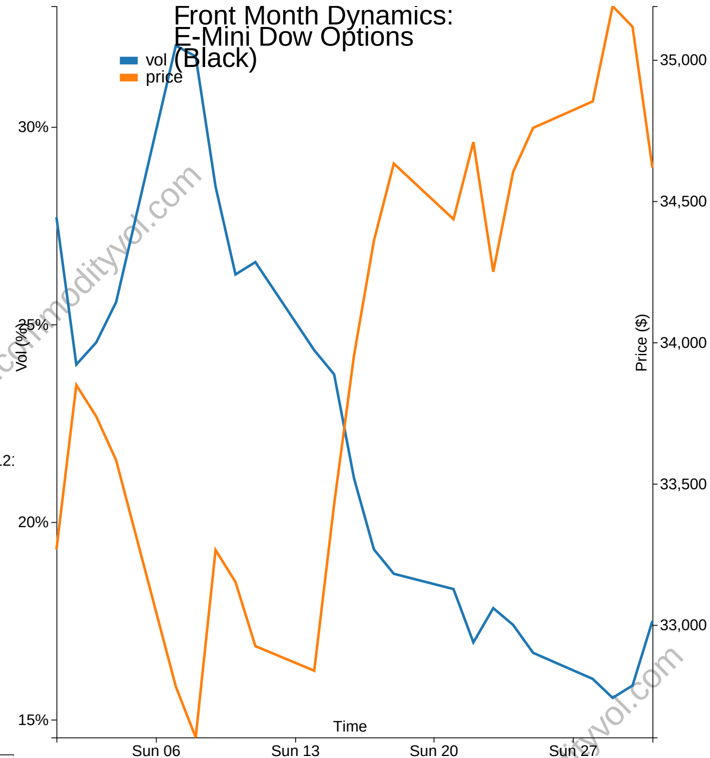


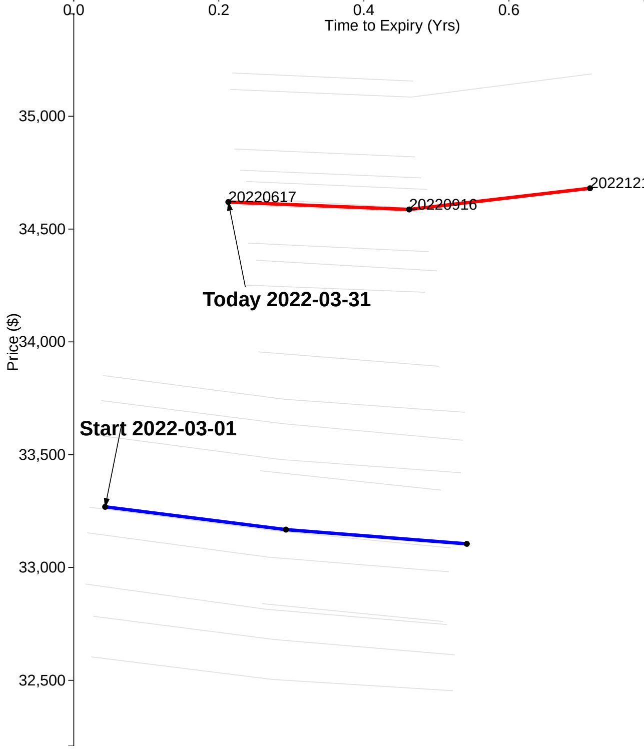
Price ($)
20220617
20221216
2023031
Today 2022-03-31
Start 2022-03-01

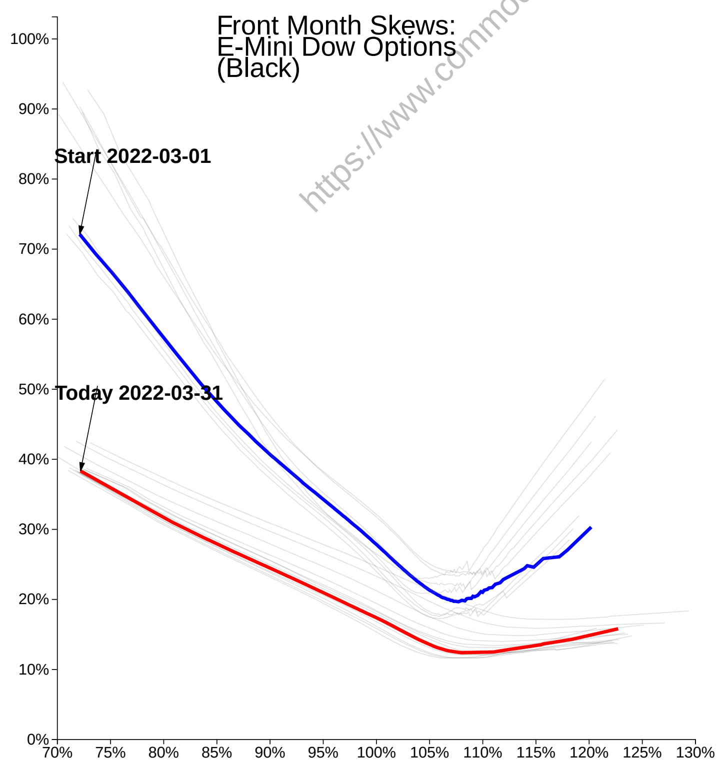


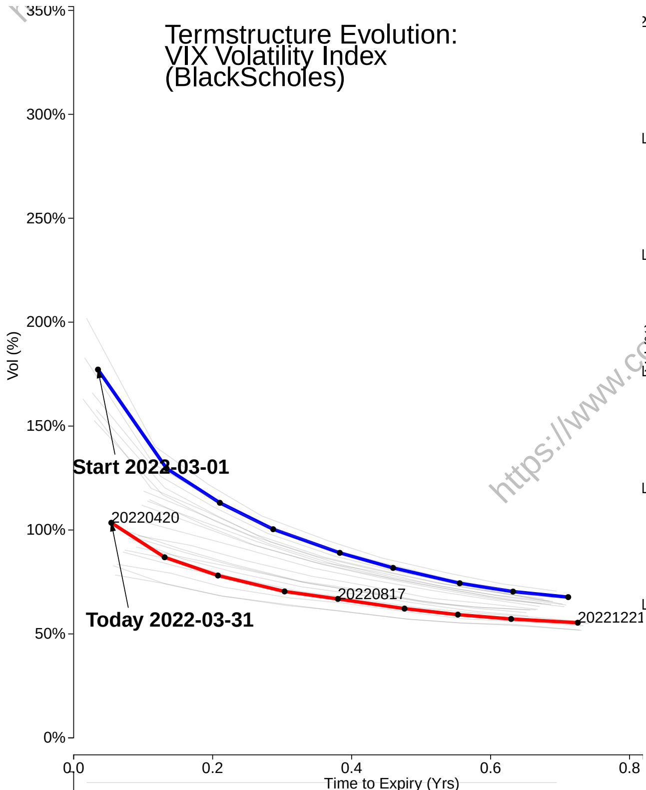
Front Month Skews:
E-Mini Nasdaq Options
(Black)
Start 2022-03-01
Today 2022-03-31

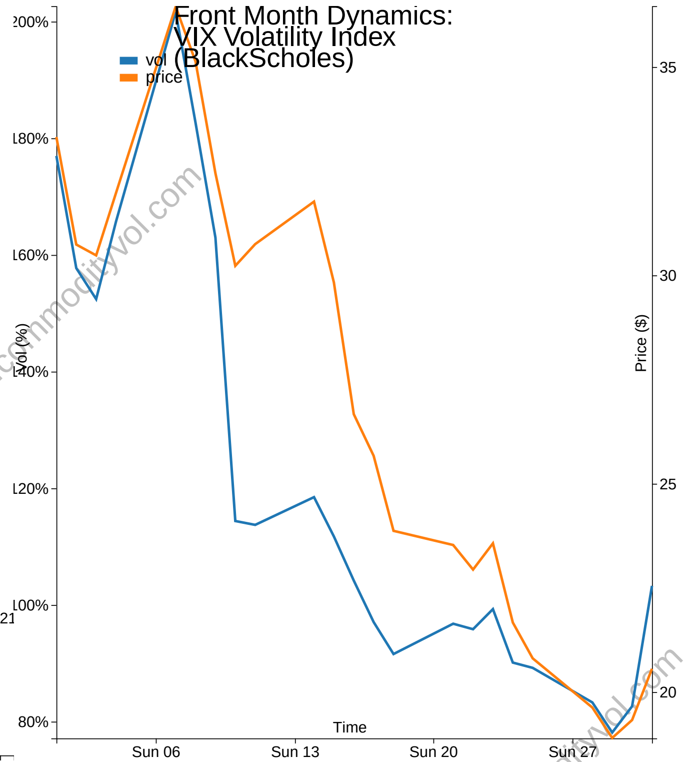

Termstructure Evolution:
E-Mini Dow Options
(Black)
Vol (%)
40%
30%
20%
10%
0%
Start 2022-03-01
Today 2022-03-31
20220617
20220916
2022121
0.0
0.2
0.4
0.6
Time to Expiry (Yrs)

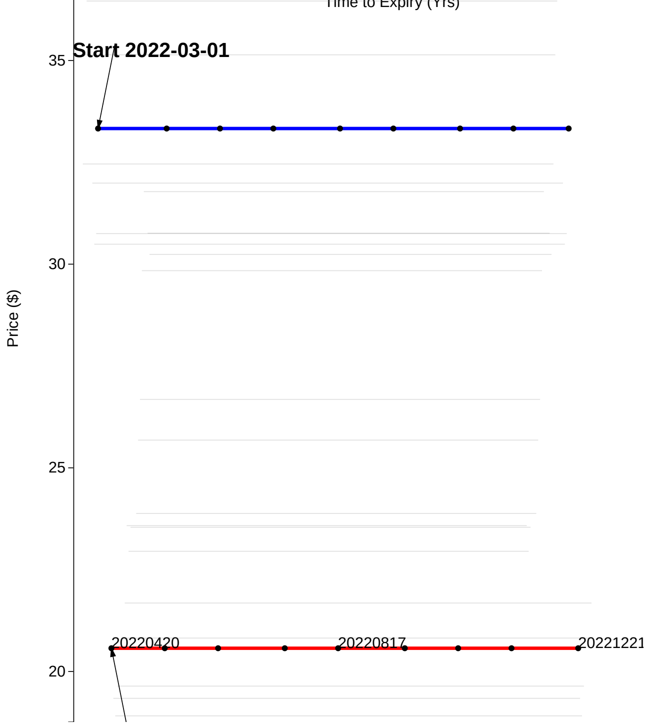

Front Month Dynamics:
E-Mini Dow Options
(Black)
vol
price
Vol (%)
30%
25%
20%
15%
Price ($)
35,000
34,500
34,000
33,500
33,000
Time
Sun 06
Sun 13
Sun 20
Sun 27

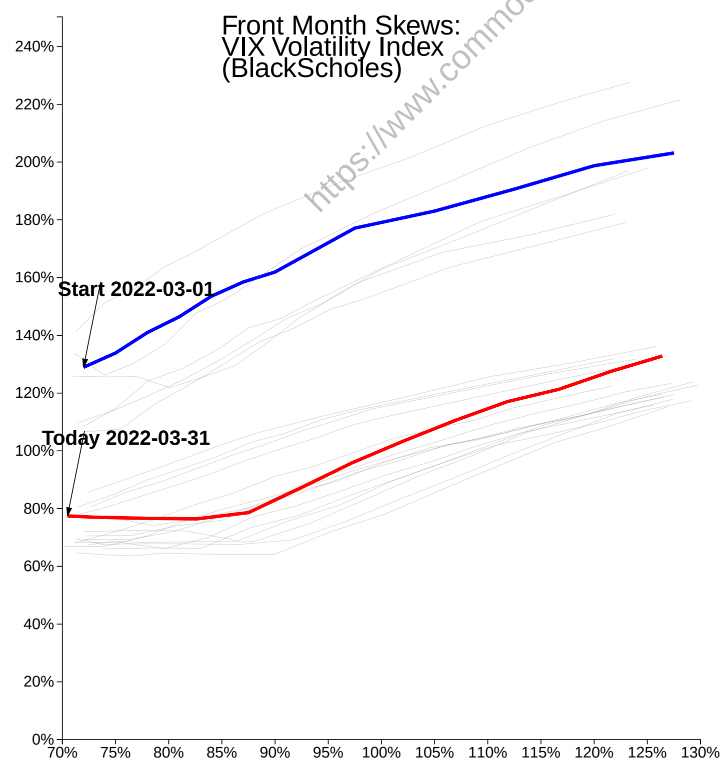

Price ($)
35,000
34,500
34,000
33,500
33,000
32,500
20220617
20220916
2022121
Today 2022-03-31
Start 2022-03-01


Front Month Skews:
E-Mini Dow Options
(Black)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Start 2022-03-01
Today 2022-03-31
70%
75%
80%
85%
90%
95%
100%
105%
110%
115%
120%
125%
130%

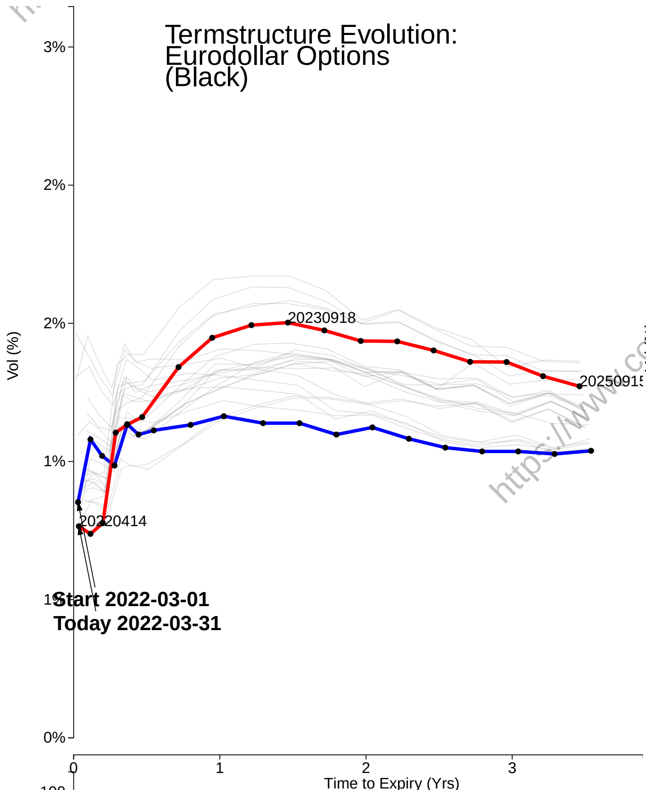

Termstructure Evolution:
VIX Volatility Index
(BlackScholes)
Vol (%)
Time to Expiry (Yrs)
Start 2022-03-01
Today 2022-03-31
20220420
20220817
20221221


Front Month Dynamics:
VIX Volatility Index
(BlackScholes)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

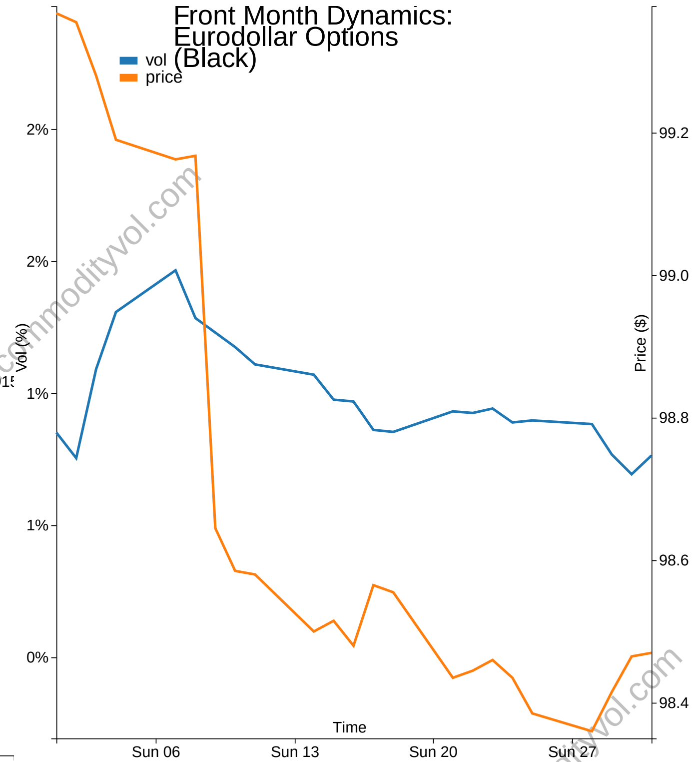

Price ($)
Start 2022-03-01
20220420
20220817
20221221


Front Month Skews:
VIX Volatility Index
(BlackScholes)
Start 2022-03-01
Today 2022-03-31

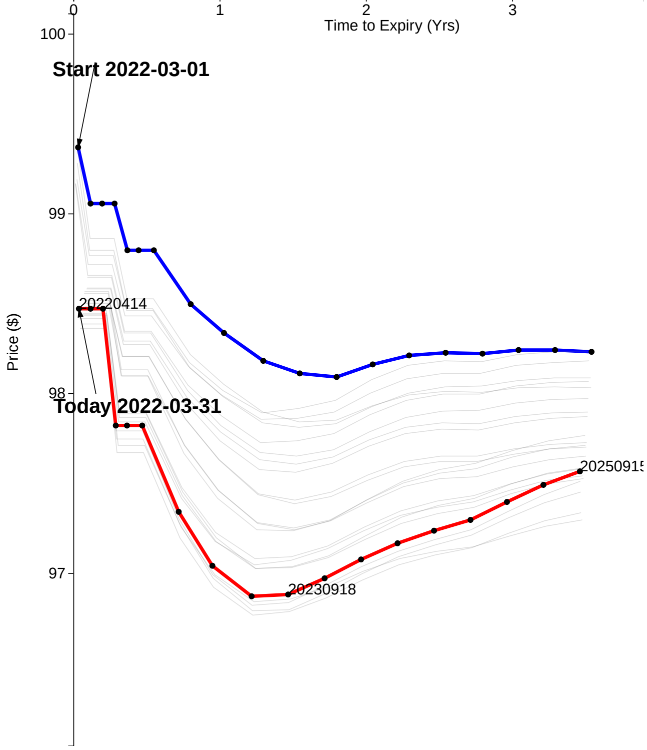
Fixed Income and STIRS



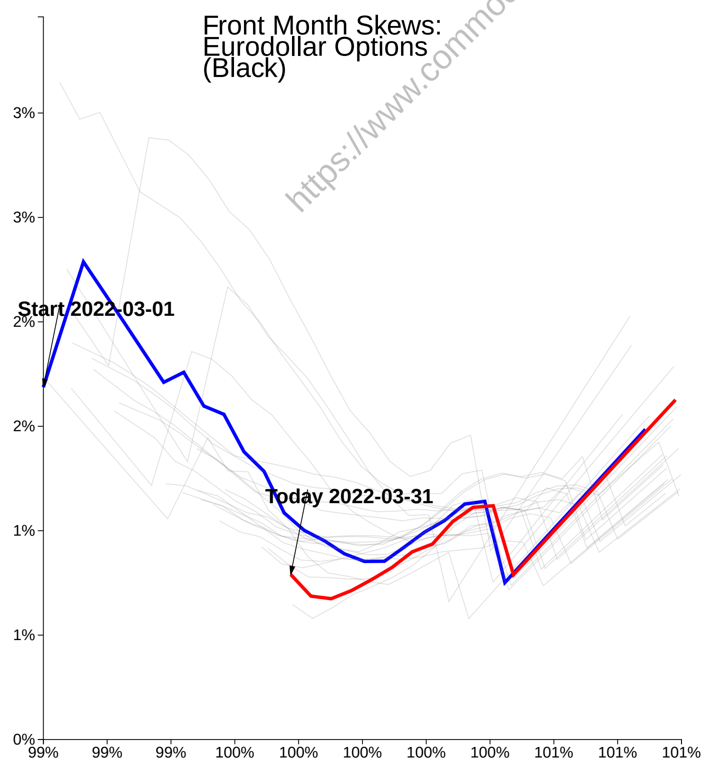
Termstructure Evolution:
Eurodollar Options
(Black)
Vol (%)
Time to Expiry (Yrs)
20230918
20250915
20220414
Start 2022-03-01
Today 2022-03-31



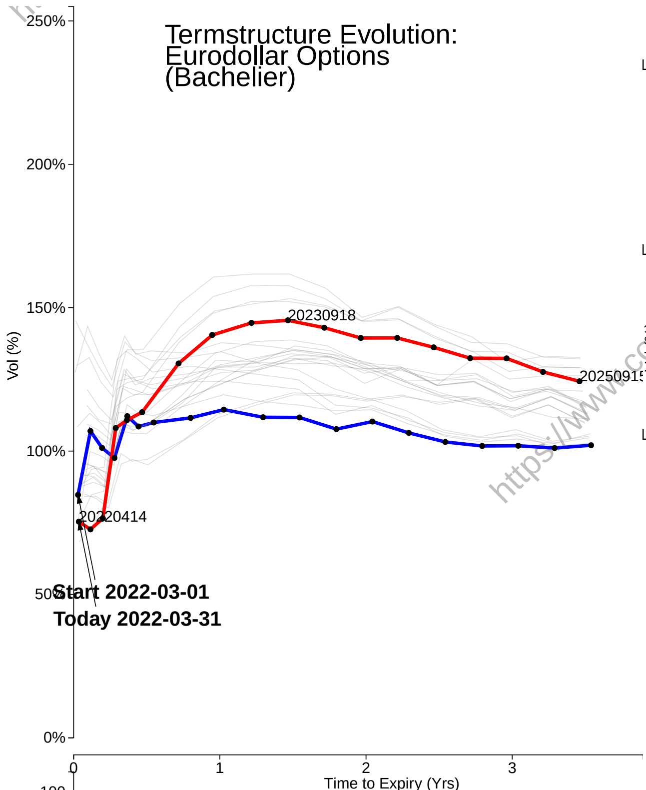
Front Month Dynamics:
Eurodollar Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

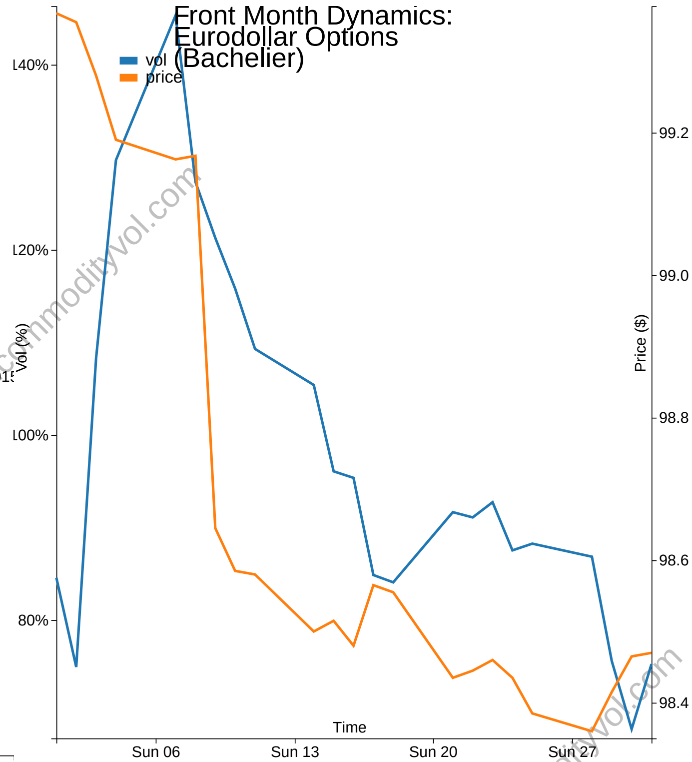


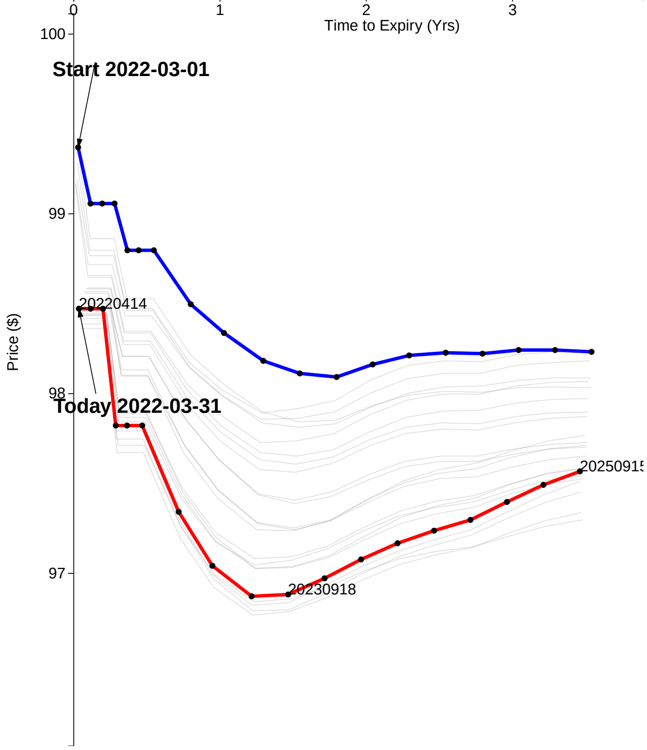
Price ($)
Start 2022-03-01
20220414
Today 2022-03-31
20250915
20230918

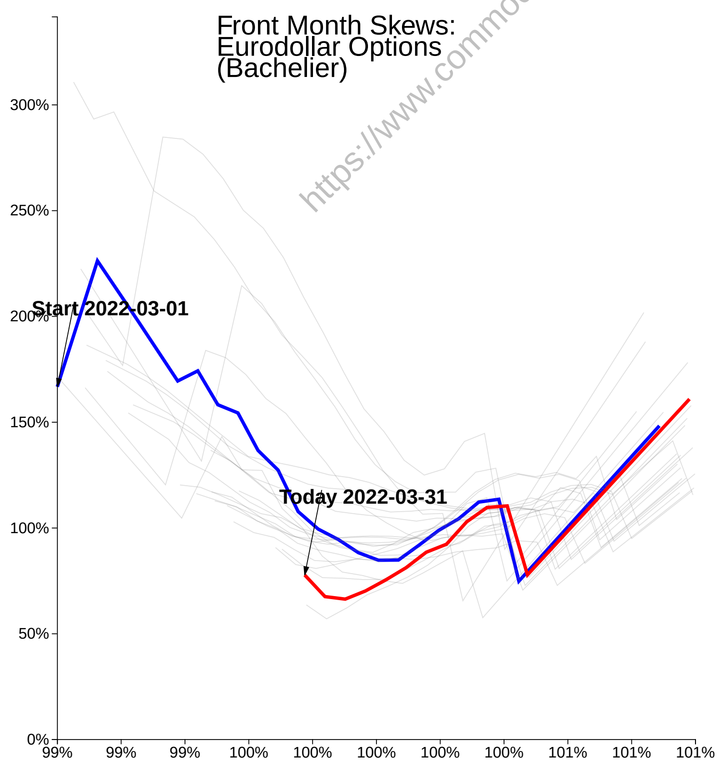


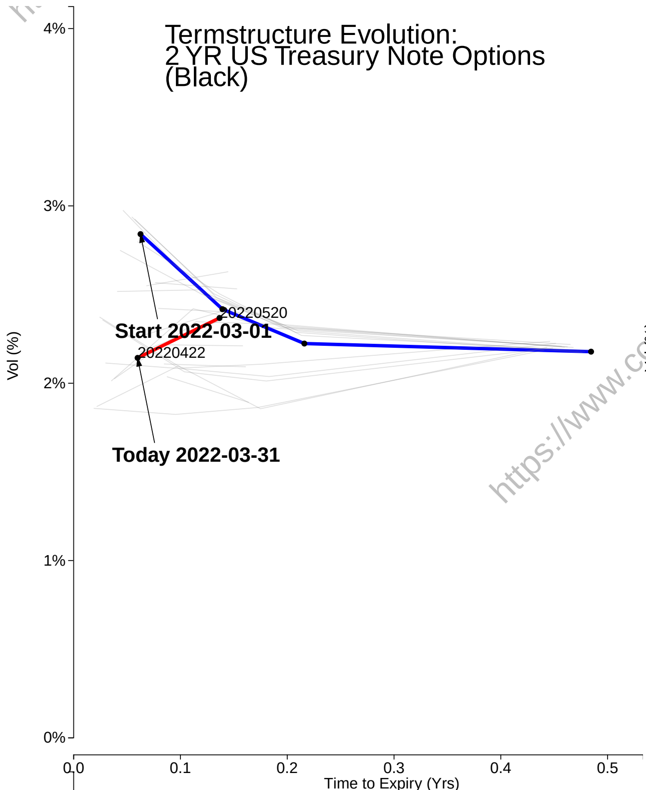
Front Month Skews:
Eurodollar Options
(Black)
Start 2022-03-01
Today 2022-03-31

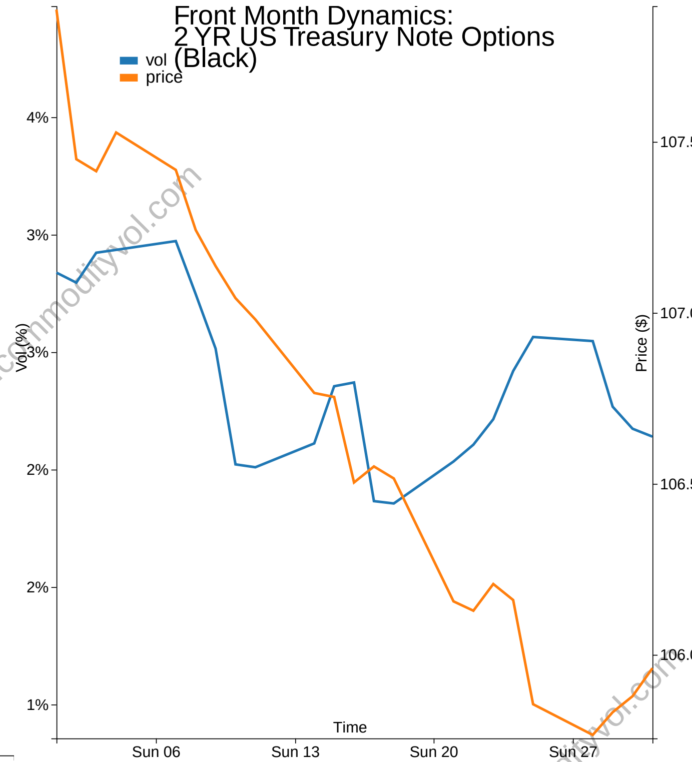

Termstructure Evolution:
Eurodollar Options
(Bachelier)
Vol (%)
Time to Expiry (Yrs)
20230918
20250915
20220414
Start 2022-03-01
Today 2022-03-31

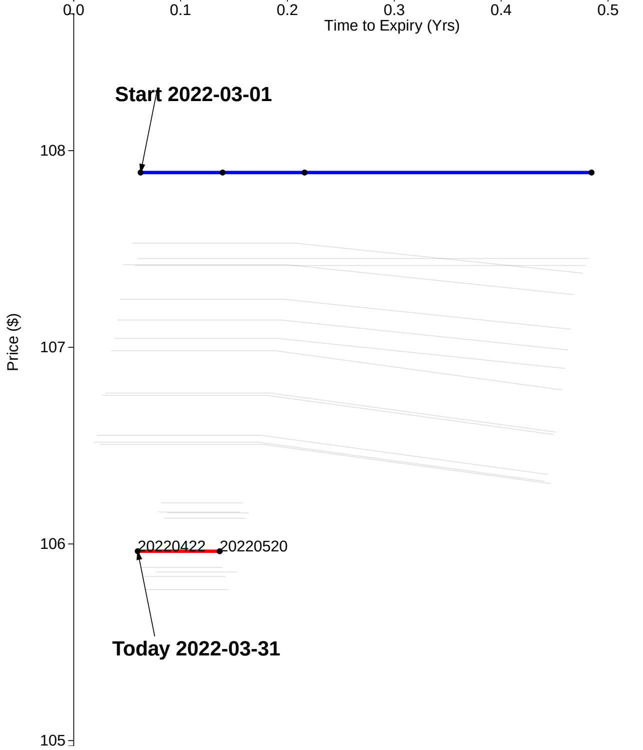

Front Month Dynamics:
Eurodollar Options
(Bachelier)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

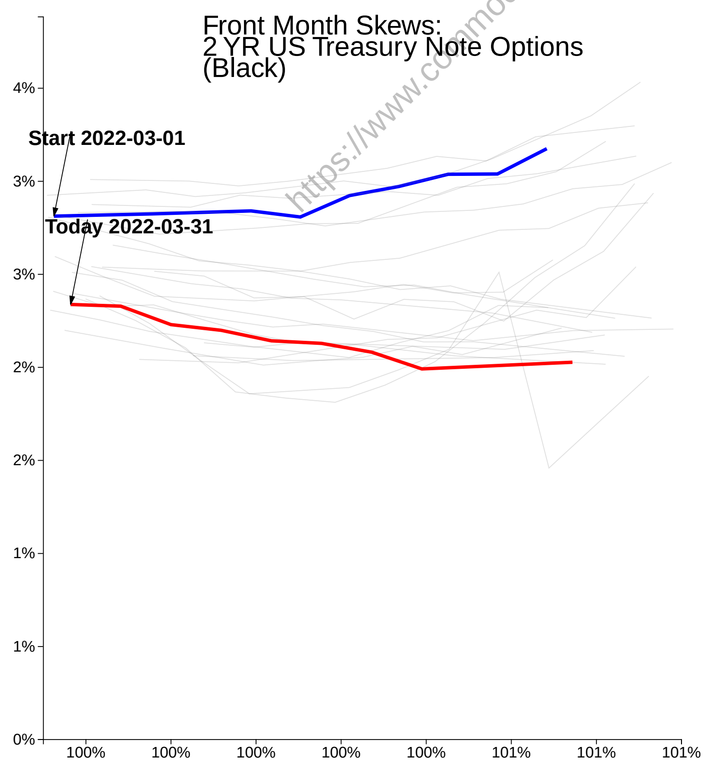

Price ($)
Start 2022-03-01
20220414
Today 2022-03-31
20250915
20230918

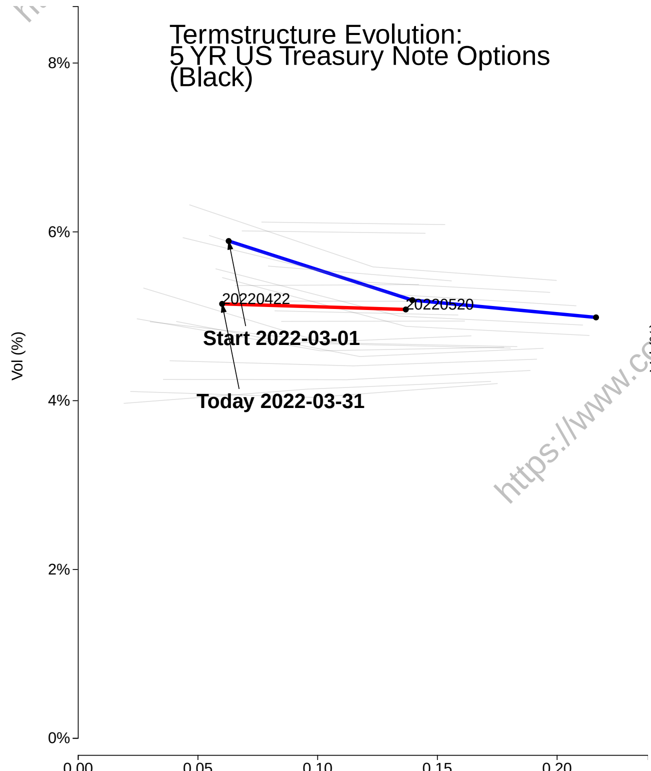

Front Month Skews:
Eurodollar Options
(Bachelier)
Start 2022-03-01
Today 2022-03-31

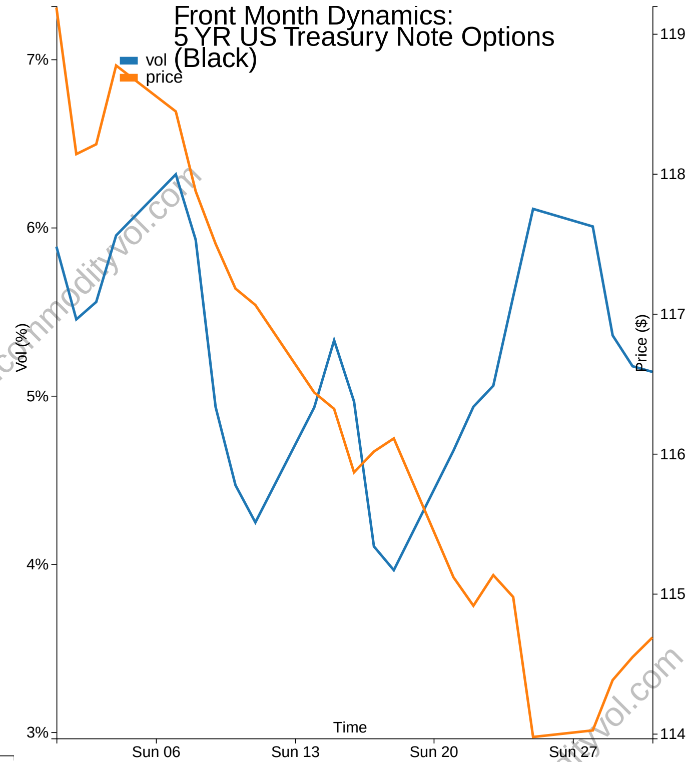

Termstructure Evolution:
2 YR US Treasury Note Options
(Black)
Vol (%)
Time to Expiry (Yrs)
Start 2022-03-01
Today 2022-03-31
20220520
20220422

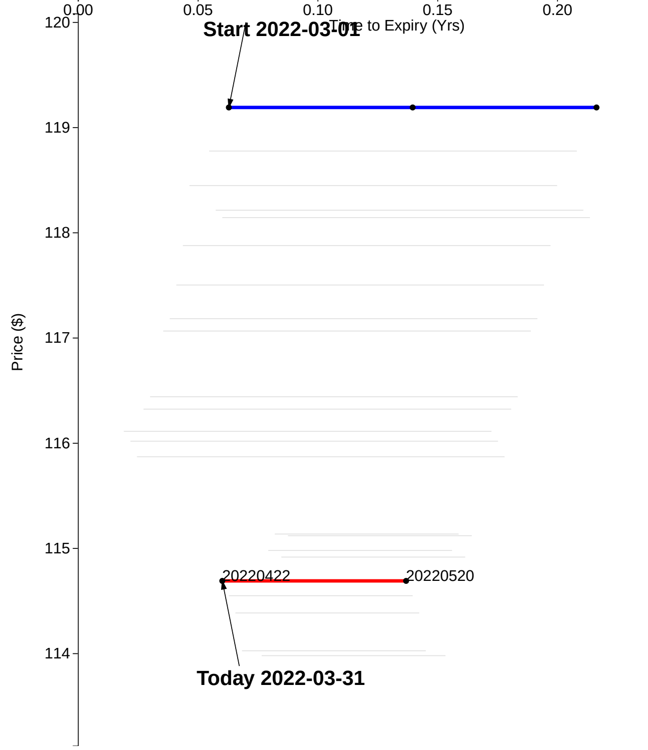

Front Month Dynamics:
2 YR US Treasury Note Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

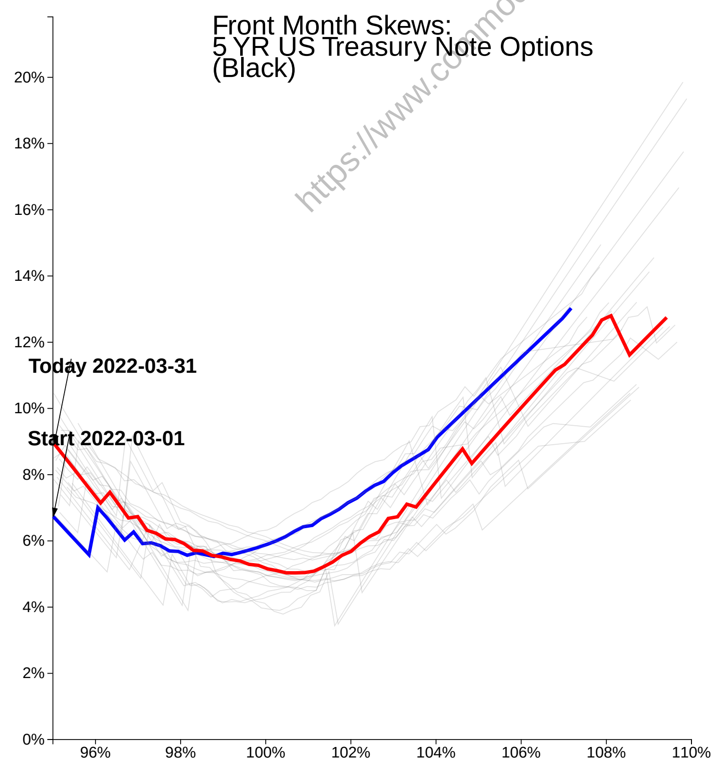

Price ($)
Start 2022-03-01
Today 2022-03-31
20220422
20220520

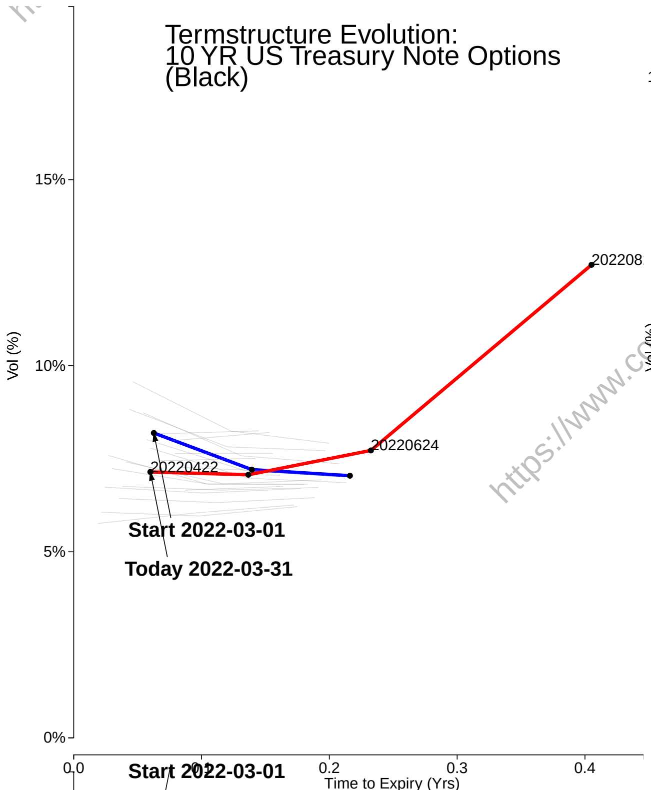

Front Month Skews:
2 YR US Treasury Note Options
(Black)
Start 2022-03-01
Today 2022-03-31

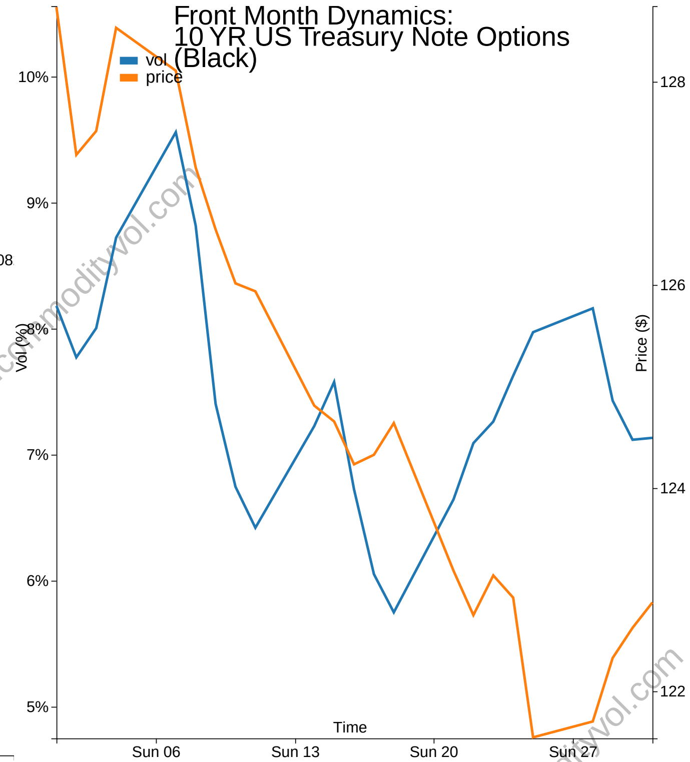

Termstructure Evolution:
5 YR US Treasury Note Options
(Black)
Vol (%)
Time to Expiry (Yrs)
20220422
20220520
Start 2022-03-01
Today 2022-03-31

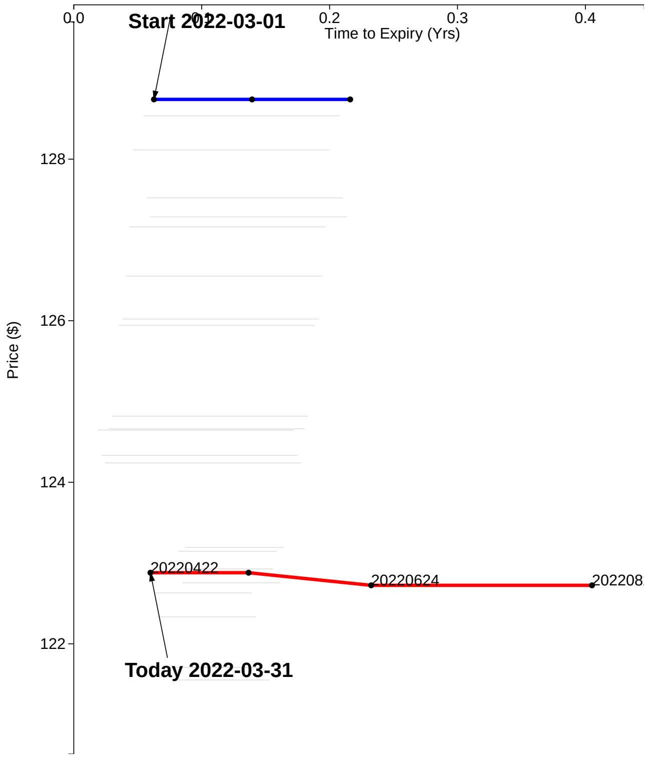

Front Month Dynamics:
5 YR US Treasury Note Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

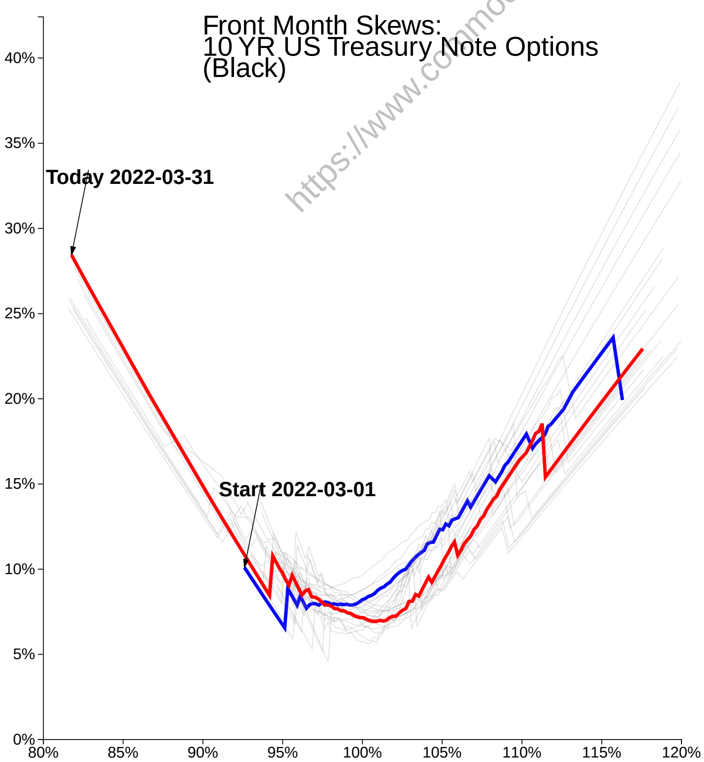

Price ($)
20220422
20220520
Start 2022-03-01
Today 2022-03-31

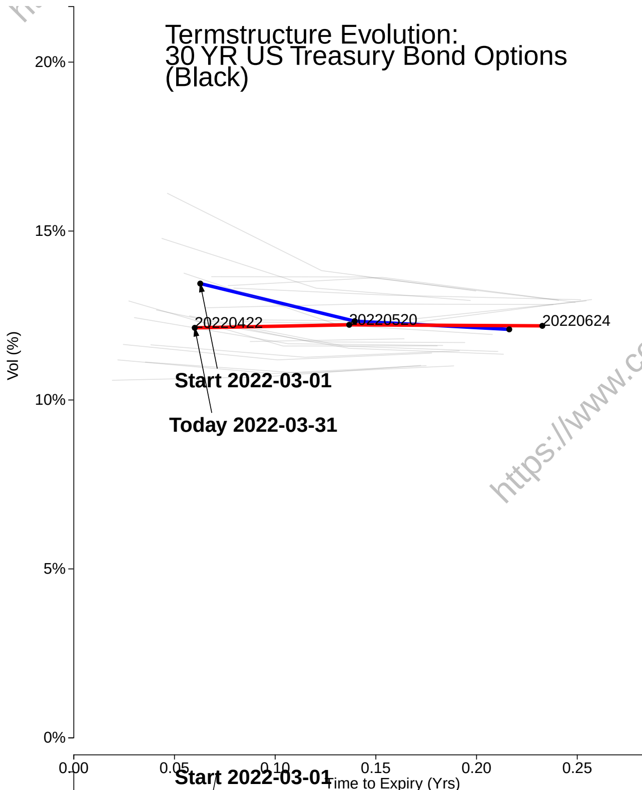

Front Month Skews:
5 YR US Treasury Note Options
(Black)
Today 2022-03-31
Start 2022-03-01

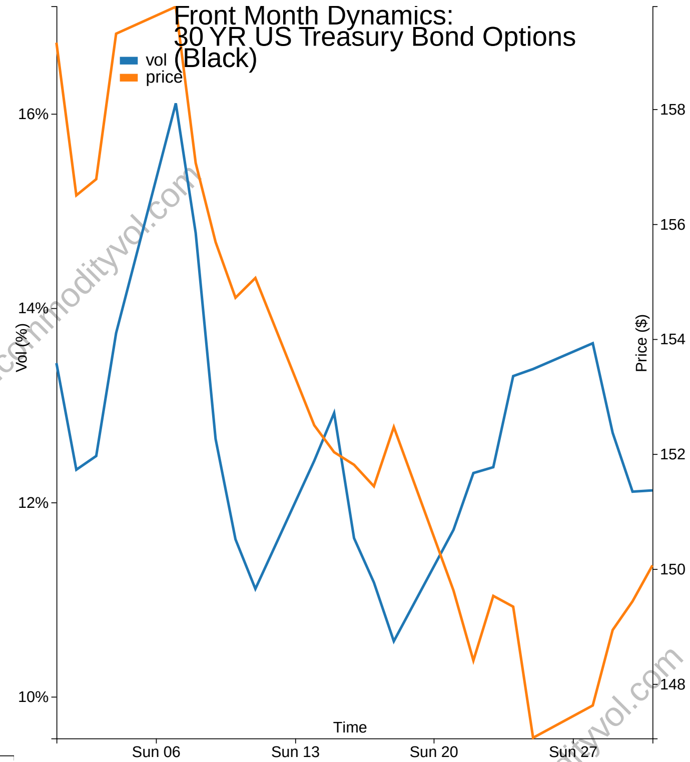

Termstructure Evolution:
10 YR US Treasury Note Options
(Black)
Vol (%)
15%
10%
5%
0%
0.0
0.1
0.2
0.3
0.4
Time to Expiry (Yrs)
20220422
20220624
202208
Start 2022-03-01
Today 2022-03-31

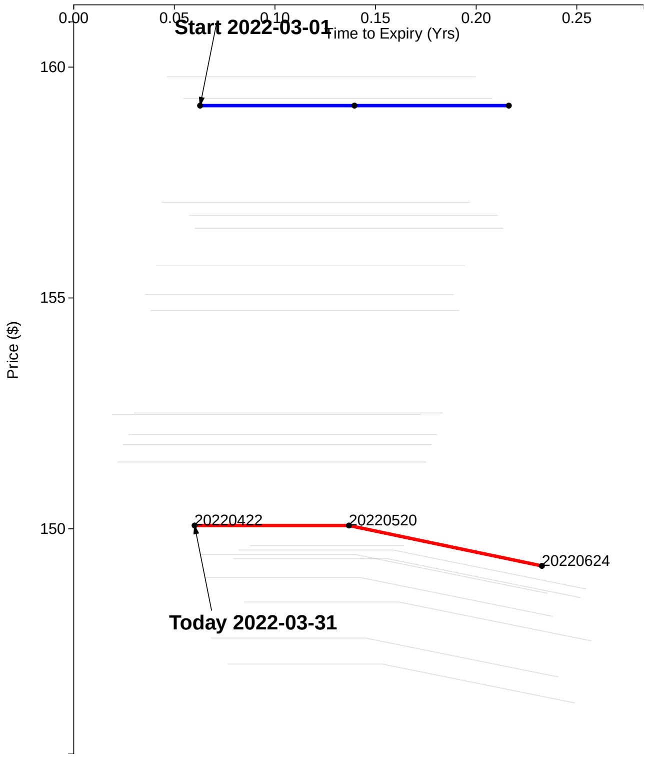

Front Month Dynamics:
10 YR US Treasury Note Options
(Black)
vol
price
Vol (%)
Price ($)
10%
9%
8%
7%
6%
5%
128
126
124
122
Time
Sun 06
Sun 13
Sun 20
Sun 27
https://www.commodityvol.com

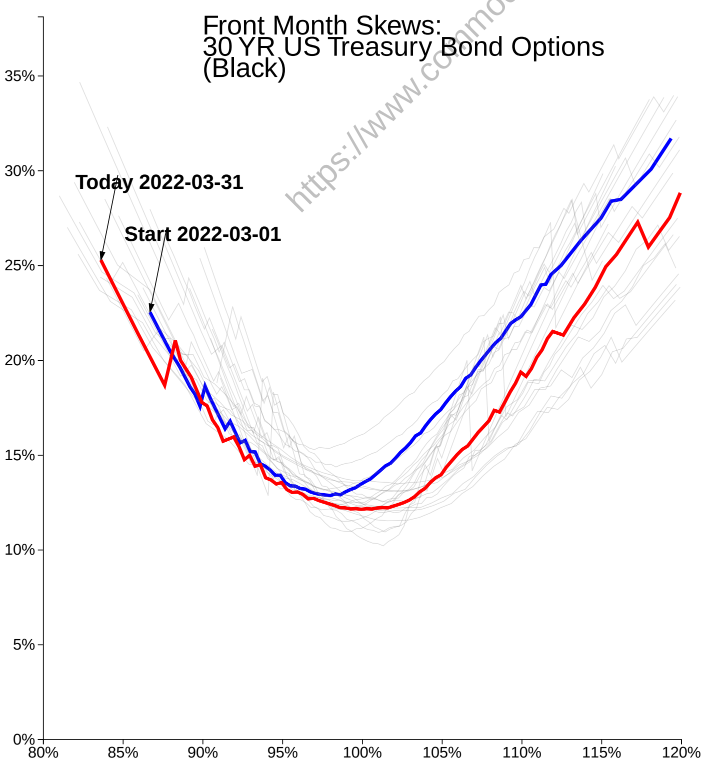

Start 2022-03-01
Price ($)
128
126
124
122
20220422
20220624
202208
Today 2022-03-31

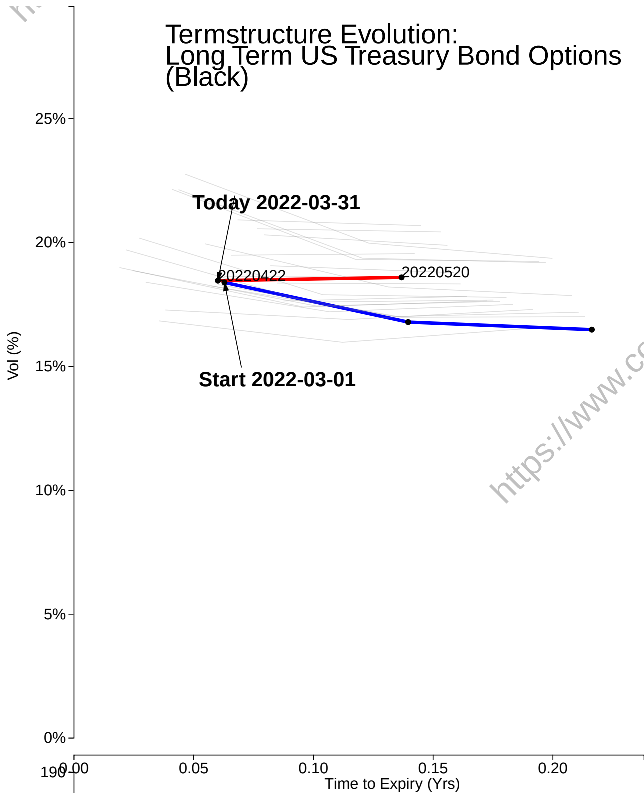

Front Month Skews:
10 YR US Treasury Note Options
(Black)
40%
35%
30%
25%
20%
15%
10%
5%
0%
80%
85%
90%
95%
100%
105%
110%
115%
120%
Today 2022-03-31
Start 2022-03-01
https://www.commodityvol.com

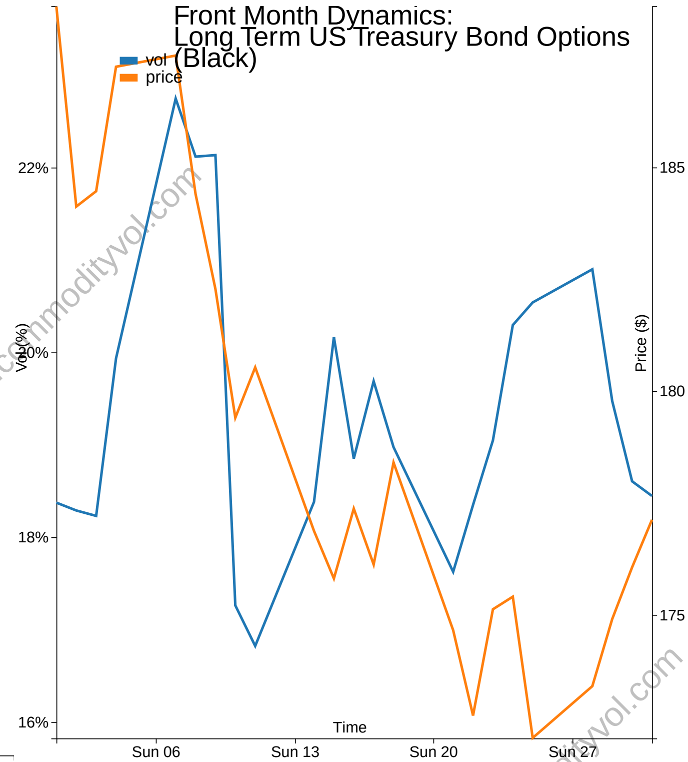

Termstructure Evolution:
30 YR US Treasury Bond Options
(Black)
Vol (%)
20%
15%
10%
5%
0%
20220422
20220520
20220624
Start 2022-03-01
Today 2022-03-31
0.00
0.05
0.10
0.15
0.20
0.25
Time to Expiry (Yrs)

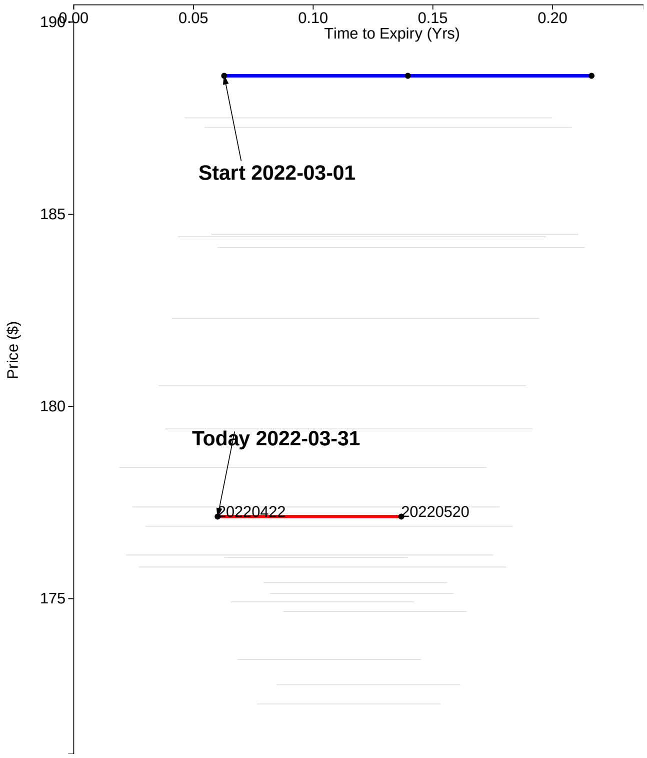

Front Month Dynamics:
30 YR US Treasury Bond Options
(Black)
vol
price
Vol (%)
Price ($)
16%
14%
12%
10%
158
156
154
152
150
148
Time
Sun 06
Sun 13
Sun 20
Sun 27

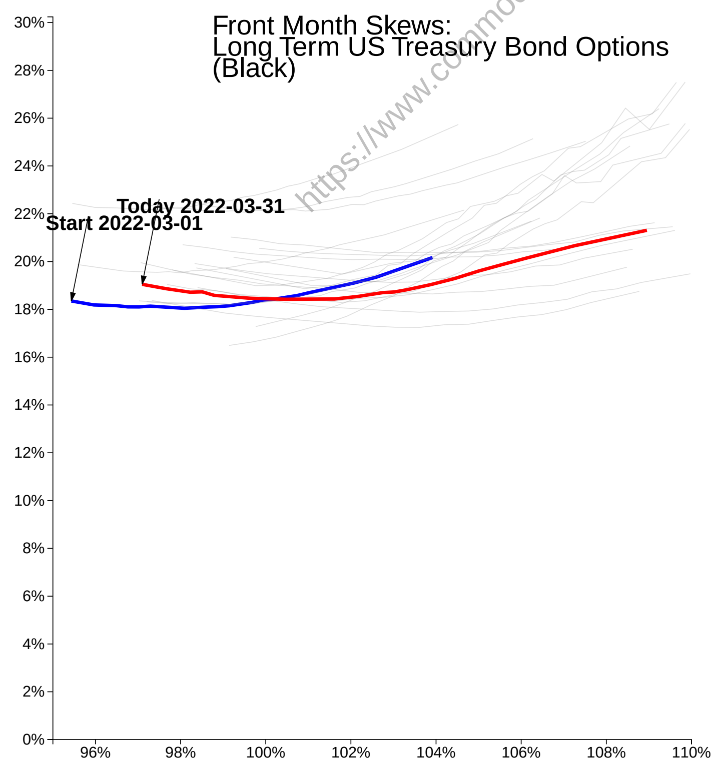

Start 2022-03-01
Price ($)
160
155
150
20220422
20220520
20220624
Today 2022-03-31


Front Month Skews:
30 YR US Treasury Bond Options
(Black)
35%
30%
25%
20%
15%
10%
5%
0%
Today 2022-03-31
Start 2022-03-01
80%
85%
90%
95%
100%
105%
110%
115%
120%

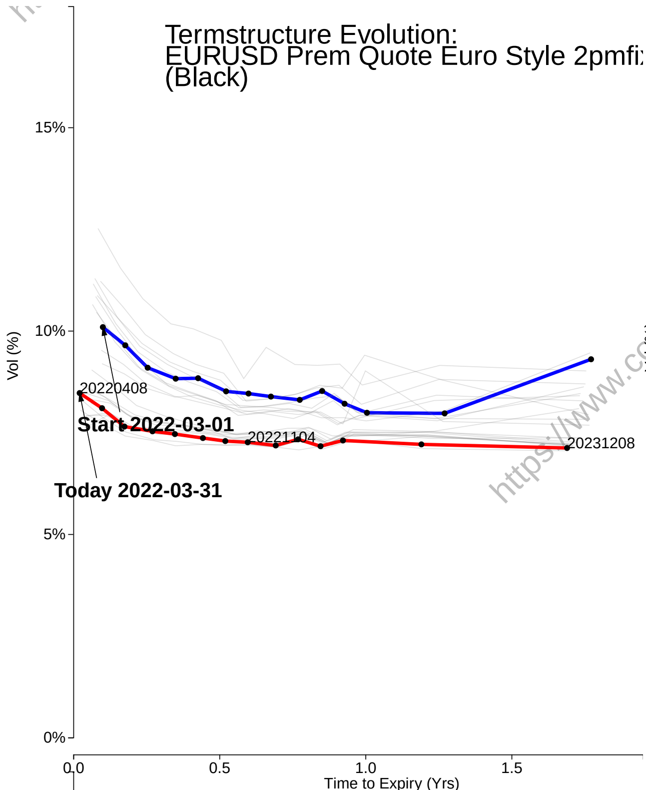

Termstructure Evolution:
Long Term US Treasury Bond Options
(Black)
Today 2022-03-31
20220422
20220520
Start 2022-03-01
Vol (%)
Time to Expiry (Yrs)
0%
5%
10%
15%
20%
25%
0.00
0.05
0.10
0.15
0.20

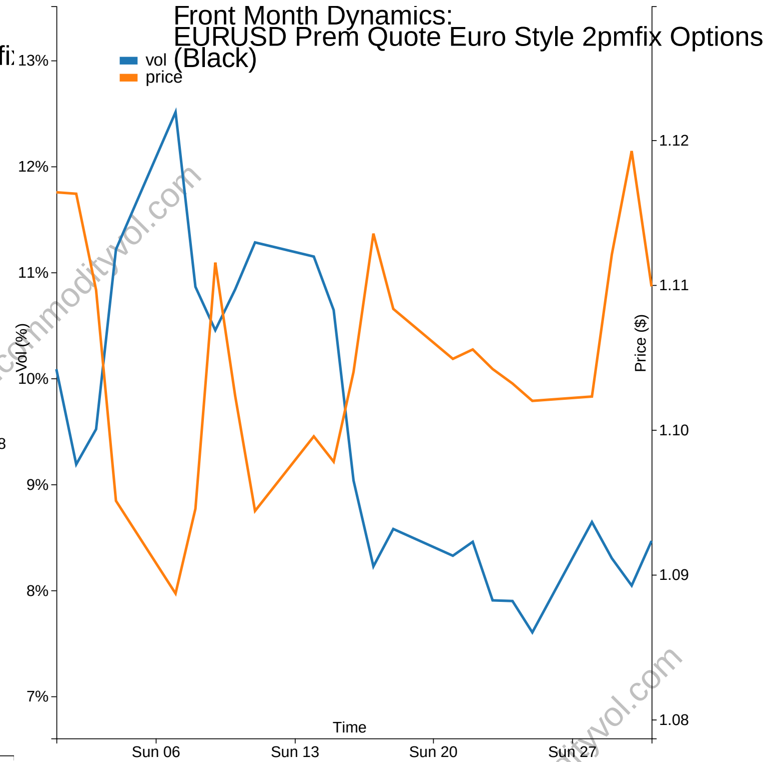

Front Month Dynamics:
Long Term US Treasury Bond Options
(Black)
vol
price
Vol (%)
Price ($)
Time
16%
18%
20%
22%
175
180
185
Sun 06
Sun 13
Sun 20
Sun 27

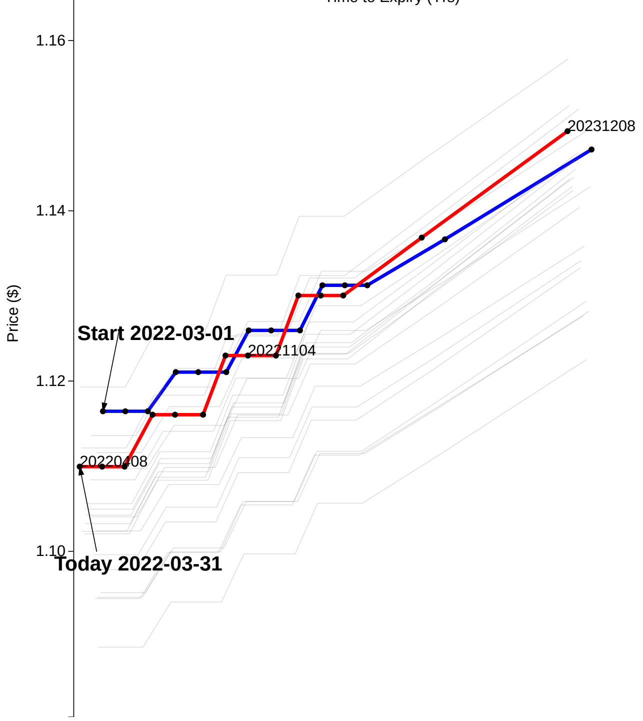

Price ($)
175
180
185
190
Start 2022-03-01
Today 2022-03-31
20220422
20220520

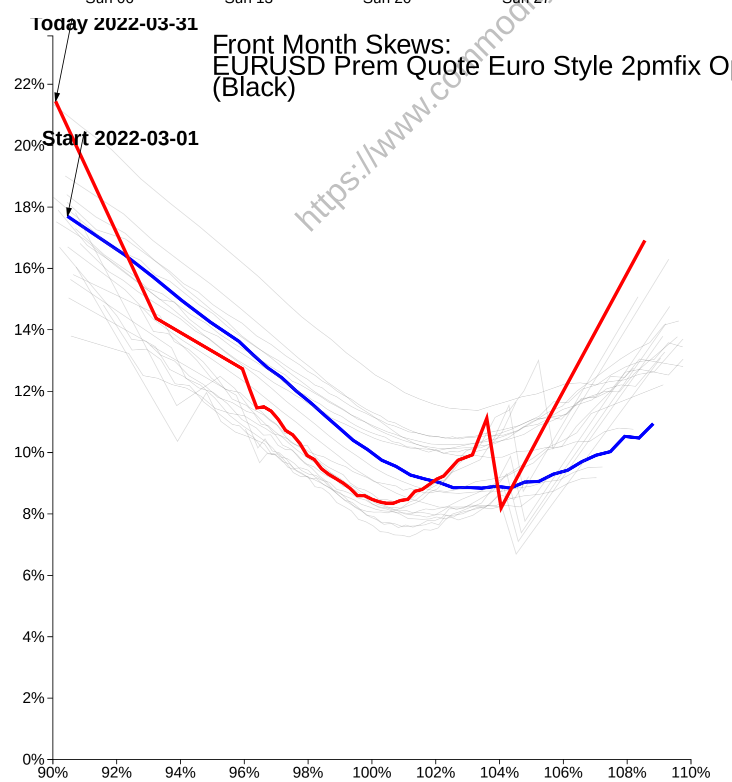

Front Month Skews:
Long Term US Treasury Bond Options
(Black)
Today 2022-03-31
Start 2022-03-01
0%
2%
4%
6%
8%
10%
12%
14%
16%
18%
20%
22%
24%
26%
28%
30%
96%
98%
100%
102%
104%
106%
108%
110%

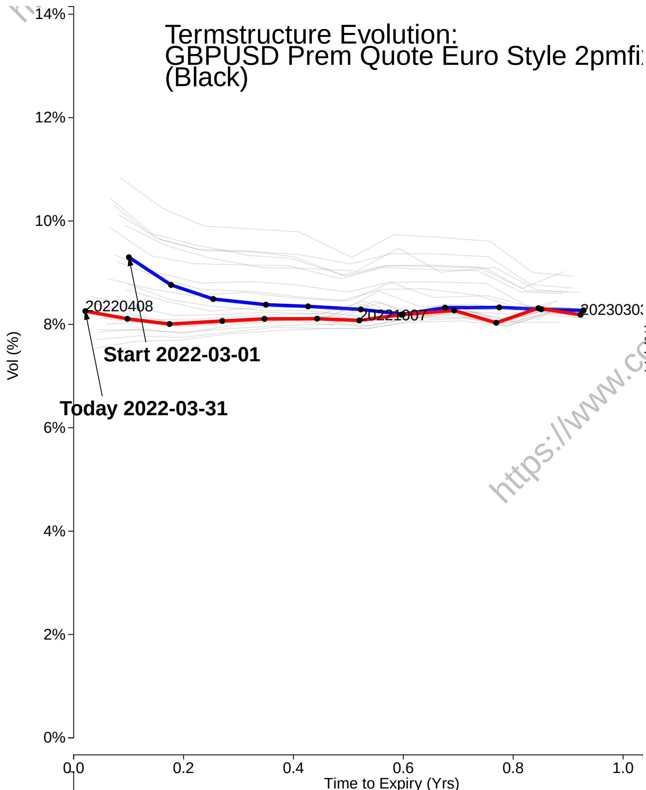
Foreign Exchange


Termstructure Evolution:
EURUSD Prem Quote Euro Style 2pmfix
(Black)
Vol (%)
Time to Expiry (Yrs)
20220408
Start 2022-03-01
20221104
20231208
Today 2022-03-31

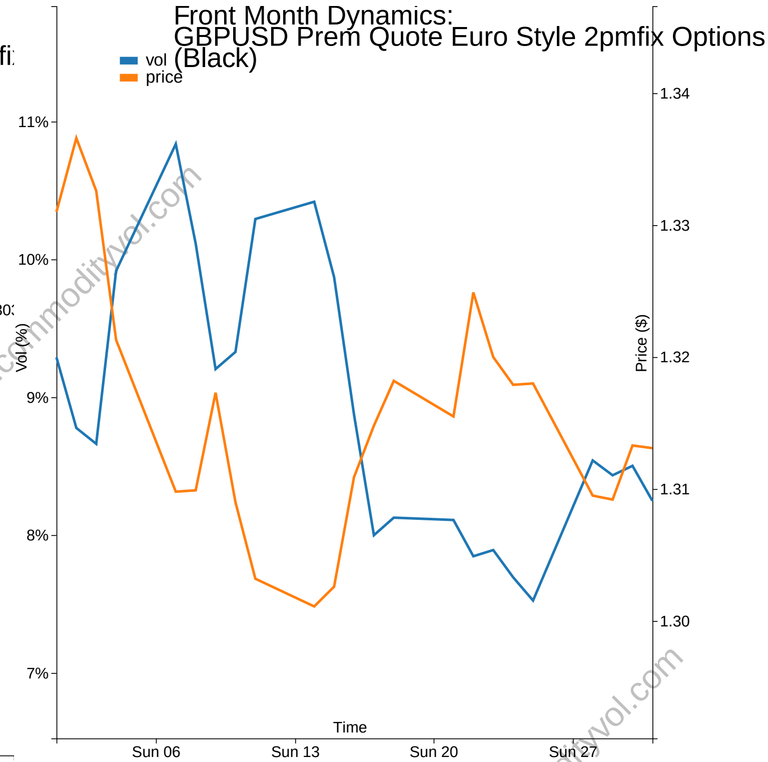

Front Month Dynamics:
EURUSD Prem Quote Euro Style 2pmfix Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27


Price ($)
20231208
Start 2022-03-01
20221104
20220408
Today 2022-03-31

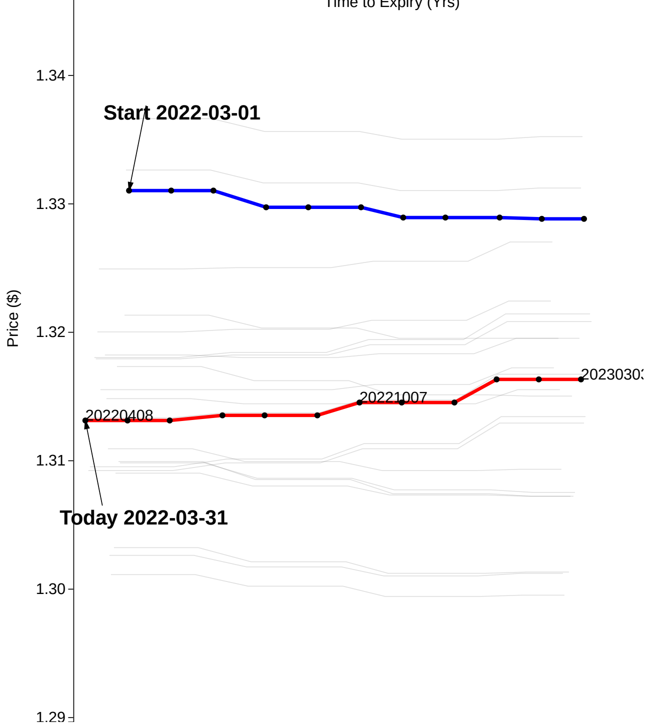

Today 2022-03-31
Front Month Skews:
EURUSD Prem Quote Euro Style 2pmfix O
(Black)
Start 2022-03-01



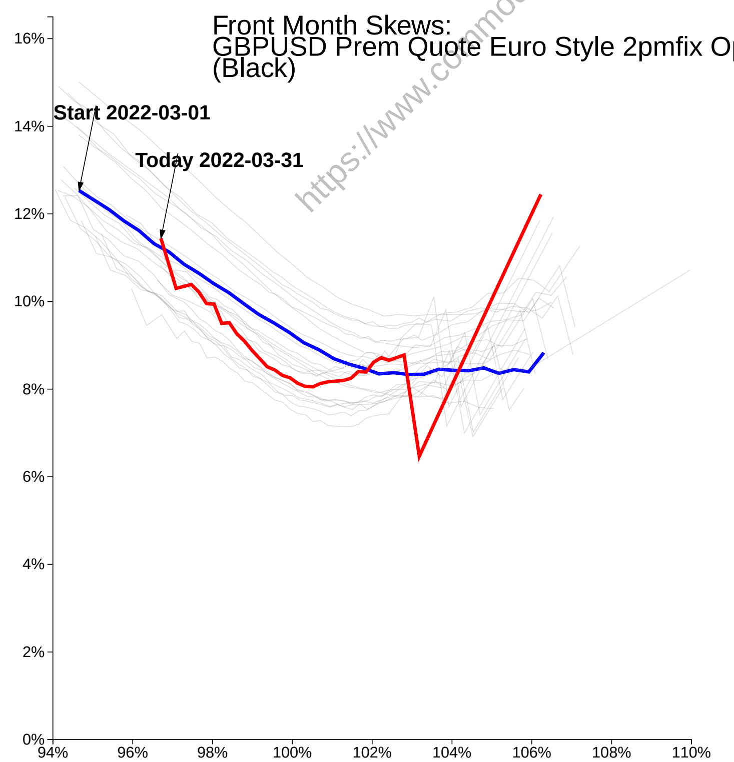
Termstructure Evolution:
GBPUSD Prem Quote Euro Style 2pmfi
(Black)
14%
12%
10%
8%
6%
4%
2%
0%
Vol (%)
20220408
20221007
2023030
Start 2022-03-01
Today 2022-03-31
0.0
0.2
0.4
0.6
0.8
1.0
Time to Expiry (Yrs)



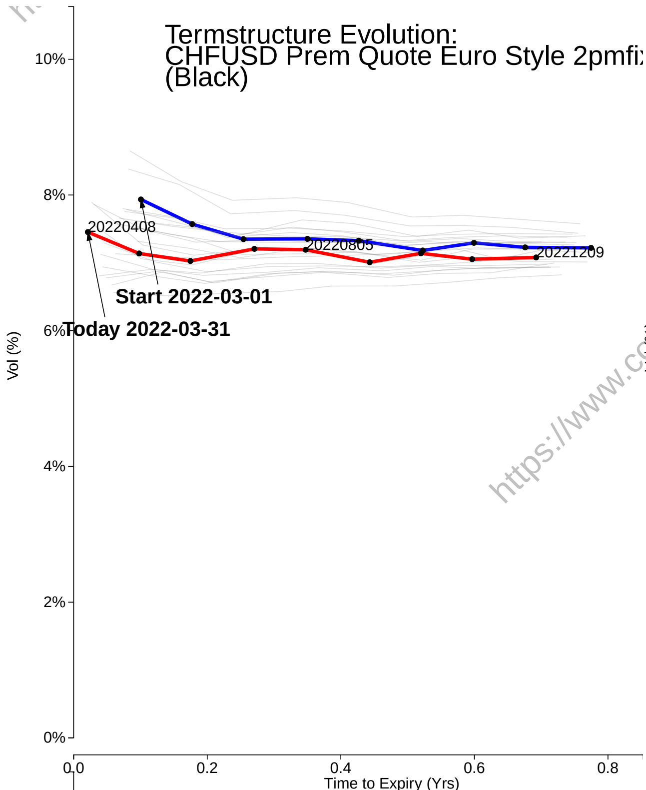
Front Month Dynamics:
GBPUSD Prem Quote Euro Style 2pmfix Options
(Black)
vol
price
11%
10%
9%
8%
7%
Vol (%)
1.34
1.33
1.32
1.31
1.30
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

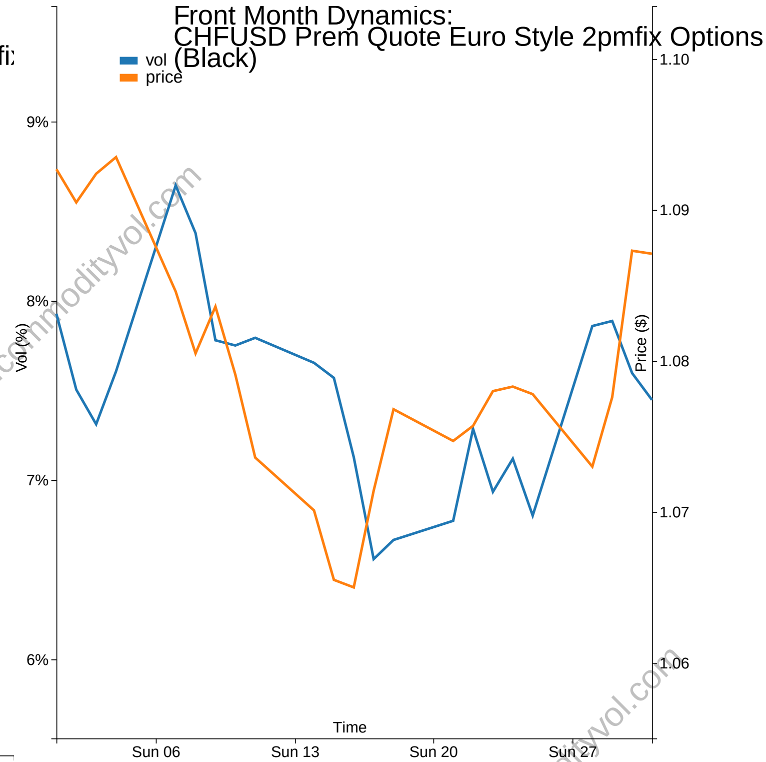


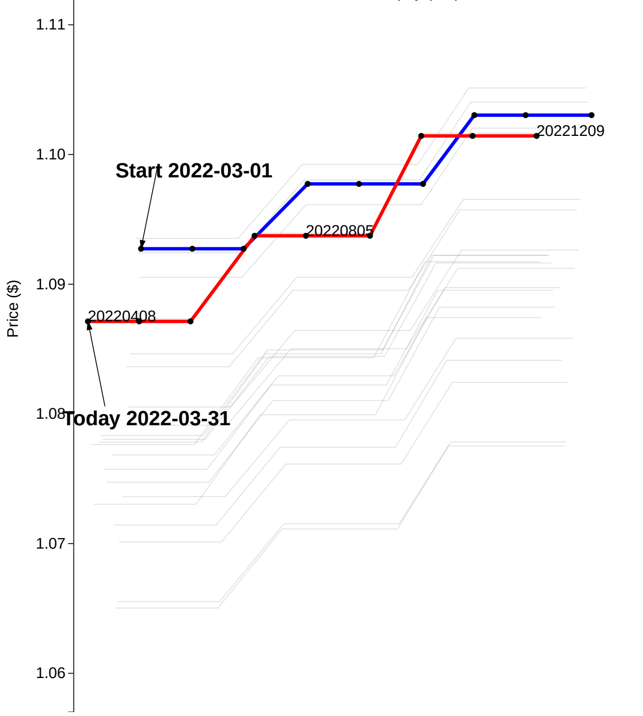
1.34
1.33
1.32
1.31
1.30
1.29
Price ($)
Start 2022-03-01
Today 2022-03-31
20220408
20221007
2023030

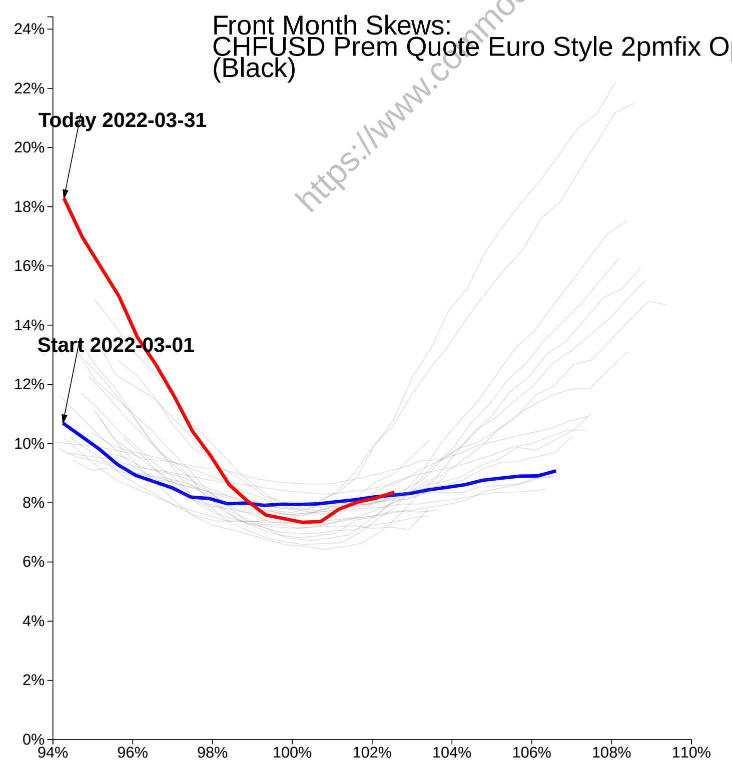


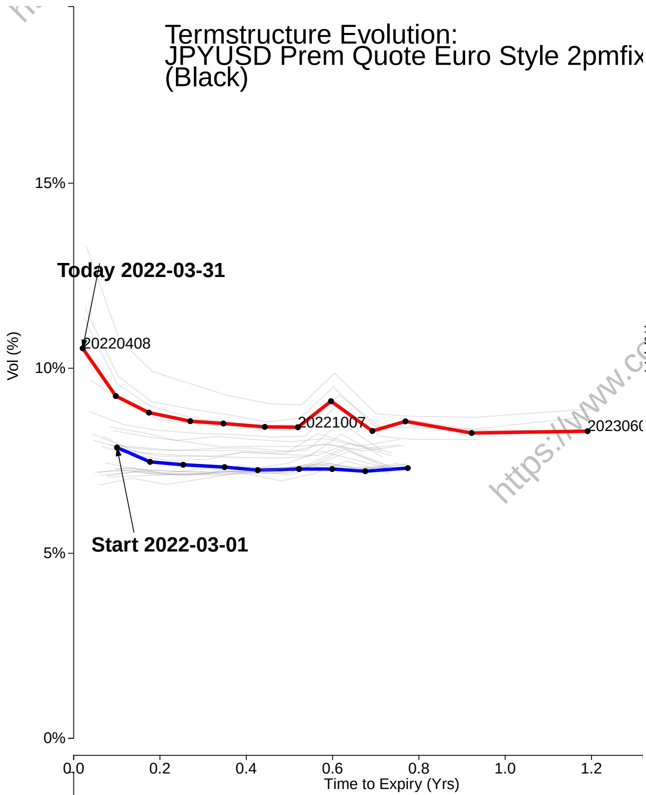
Front Month Skews:
GBPUSD Prem Quote Euro Style 2pmfix O
(Black)
Start 2022-03-01
Today 2022-03-31
16%
14%
12%
10%
8%
6%
4%
2%
0%
94%
96%
98%
100%
102%
104%
106%
108%
110%

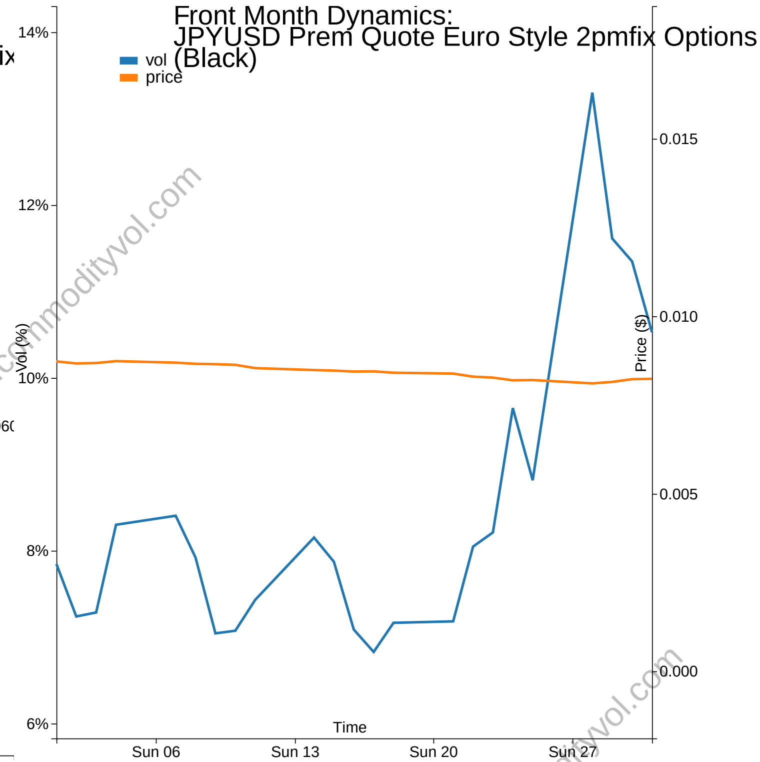

Termstructure Evolution:
CHFUSD Prem Quote Euro Style 2pmfi
(Black)
Vol (%)
10%
8%
6%
4%
2%
0%
0.0
0.2
0.4
0.6
0.8
Time to Expiry (Yrs)
20220408
20220805
20221209
Start 2022-03-01
Today 2022-03-31

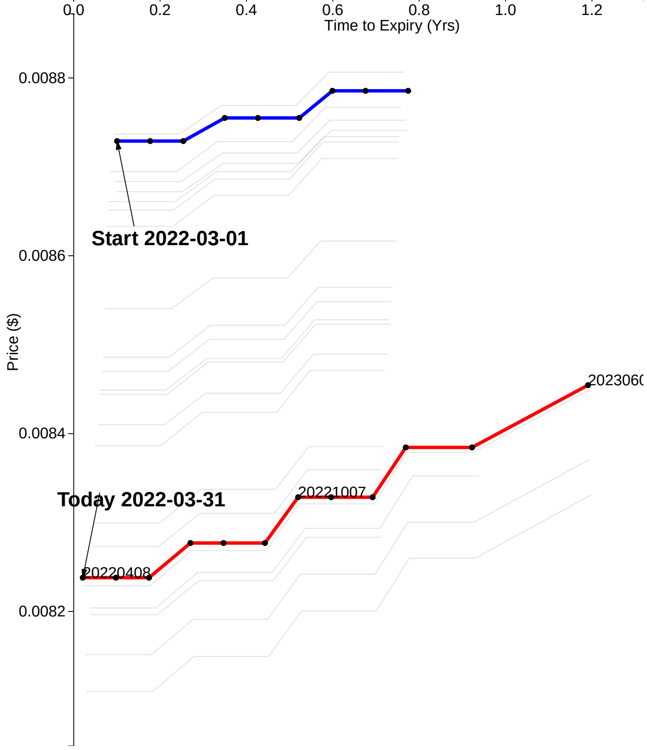

Front Month Dynamics:
CHFUSD Prem Quote Euro Style 2pmfix Options
(Black)
vol
price
Vol (%)
Price ($)
9%
8%
7%
6%
1.10
1.09
1.08
1.07
1.06
Time
Sun 06
Sun 13
Sun 20
Sun 27

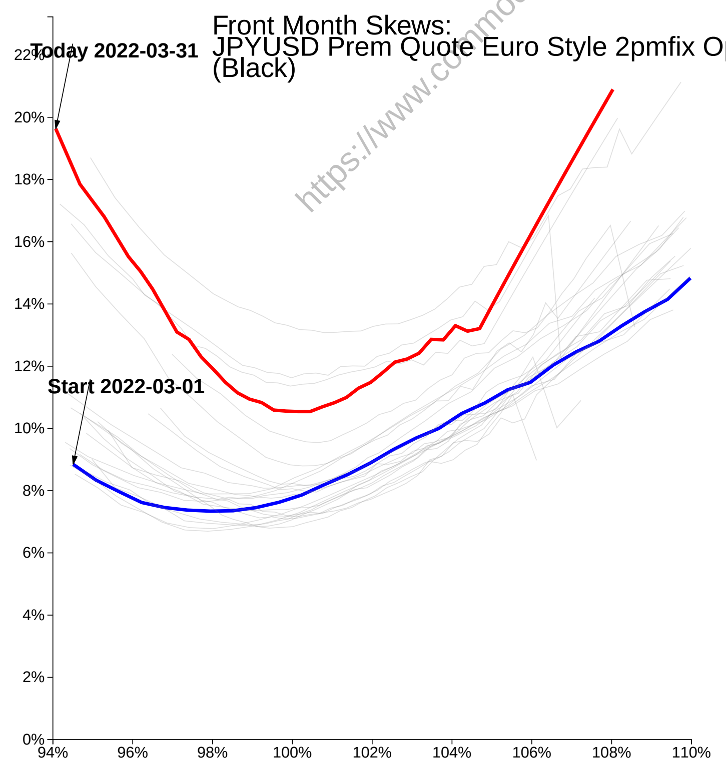

Price ($)
1.11
1.10
1.09
1.08
1.07
1.06
Start 2022-03-01
Today 2022-03-31
20220408
20220805
20221209

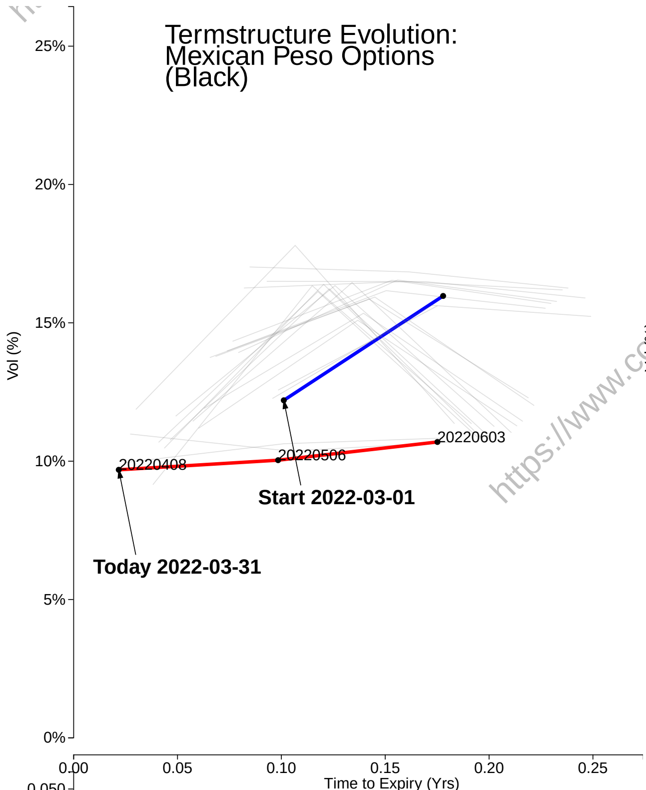

Front Month Skews:
CHFUSD Prem Quote Euro Style 2pmfix O
(Black)
Today 2022-03-31
Start 2022-03-01
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
94%
96%
98%
100%
102%
104%
106%
108%
110%

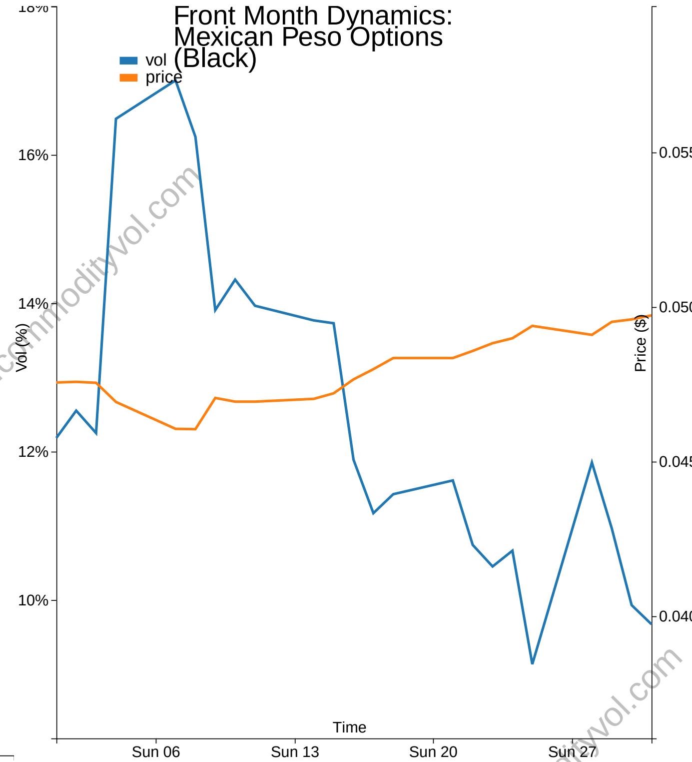

Termstructure Evolution:
JPYUSD Prem Quote Euro Style 2pmfix
(Black)
Today 2022-03-31
20220408
20221007
2023060
Start 2022-03-01
Vol (%)
Time to Expiry (Yrs)

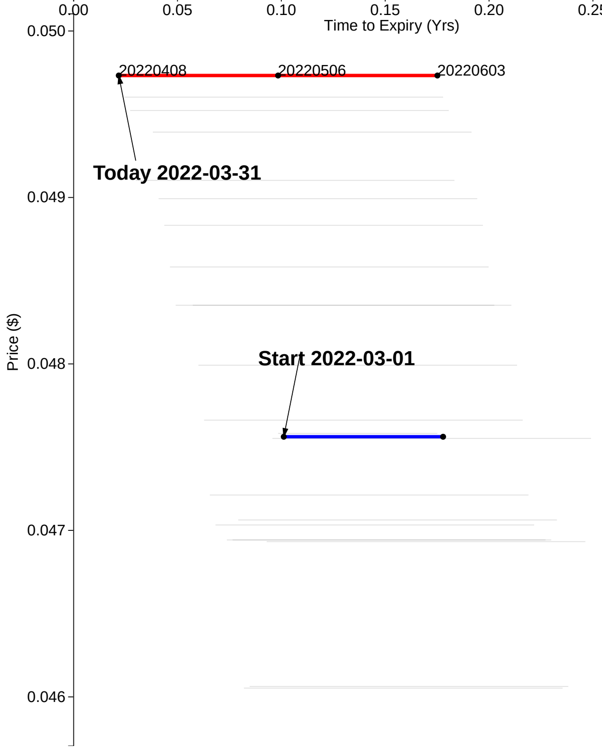

Front Month Dynamics:
JPYUSD Prem Quote Euro Style 2pmfix Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

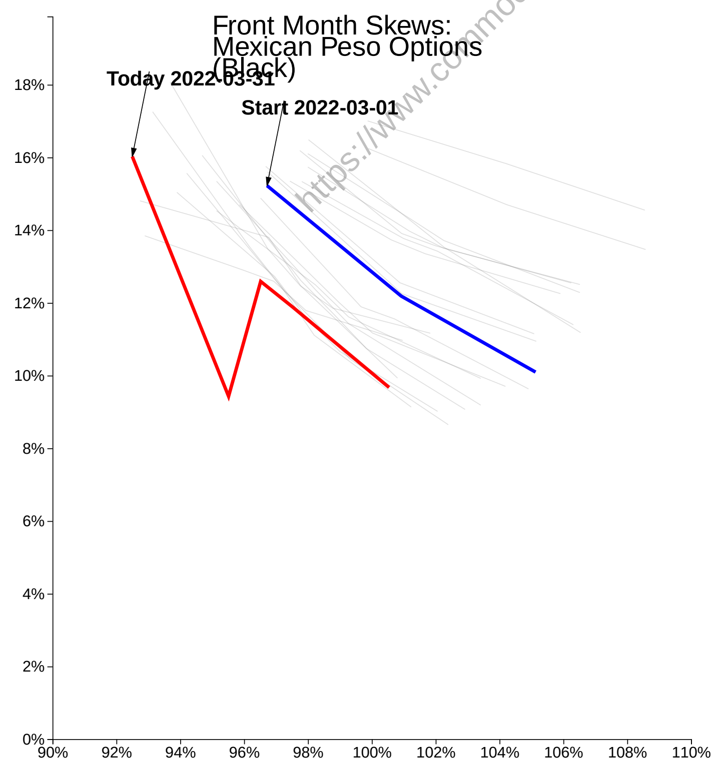

Start 2022-03-01
Today 2022-03-31
20220408
20221007
2023060
Price ($)

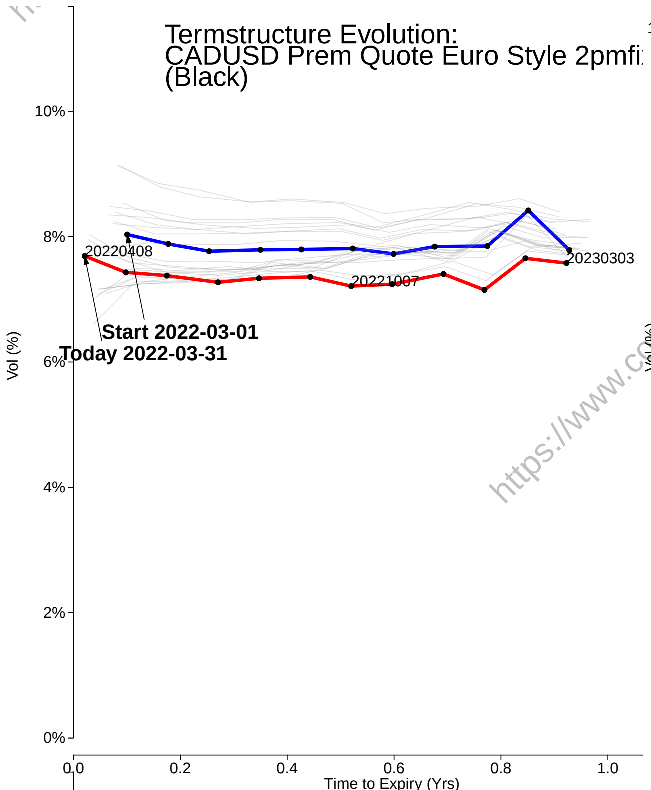

Front Month Skews:
JPYUSD Prem Quote Euro Style 2pmfix Op
(Black)
Today 2022-03-31
Start 2022-03-01

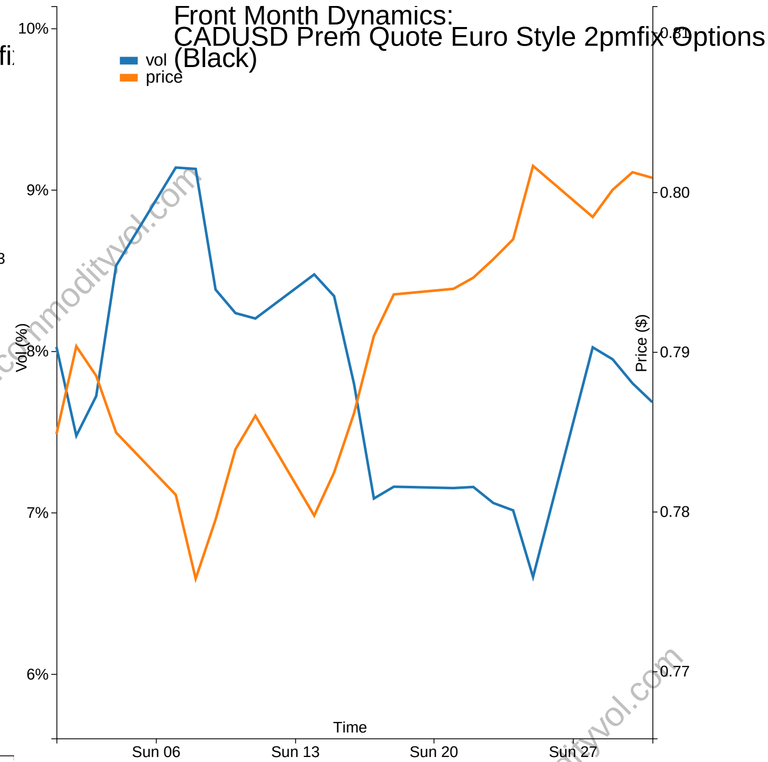

Termstructure Evolution:
Mexican Peso Options
(Black)
Vol (%)
Time to Expiry (Yrs)
20220408
20220506
20220603
Start 2022-03-01
Today 2022-03-31

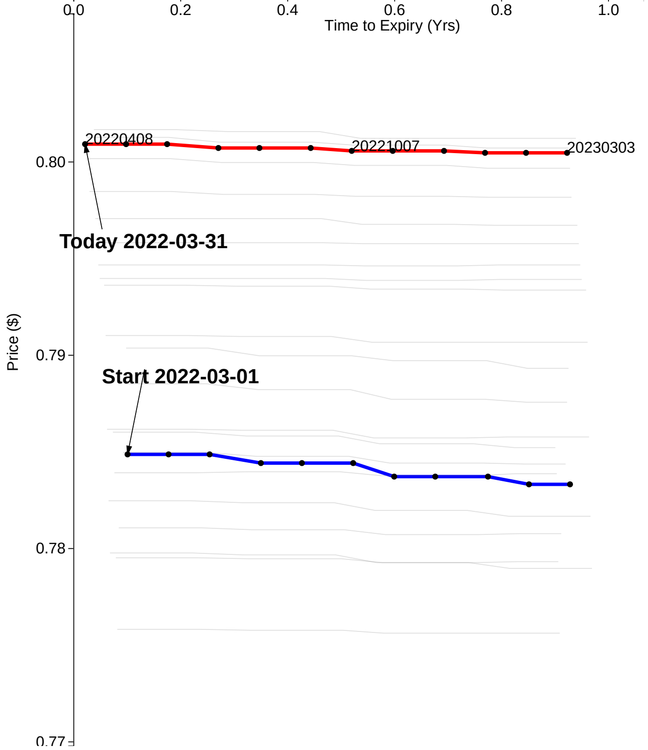

Front Month Dynamics:
Mexican Peso Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

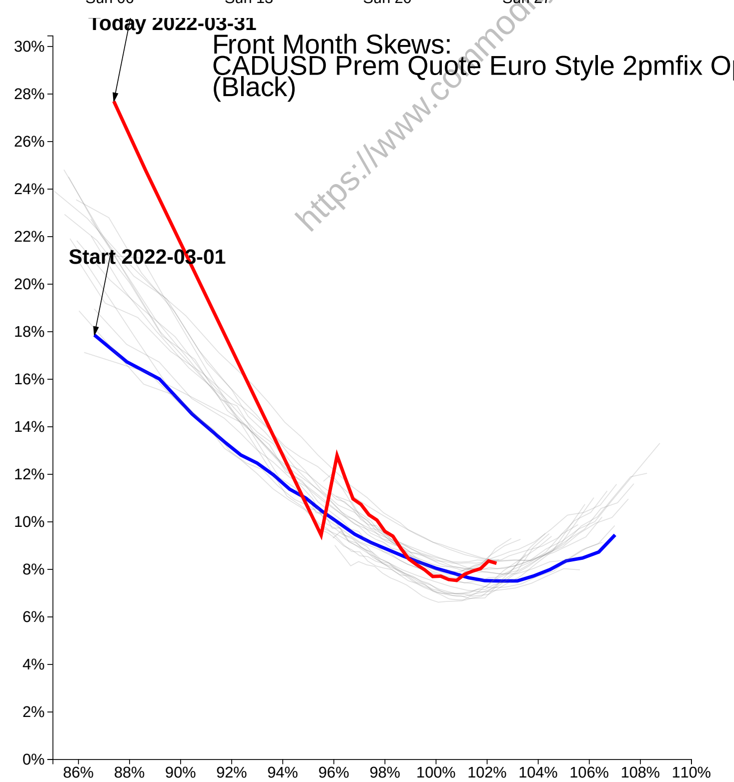

Price ($)
20220408
20220506
20220603
Today 2022-03-31
Start 2022-03-01

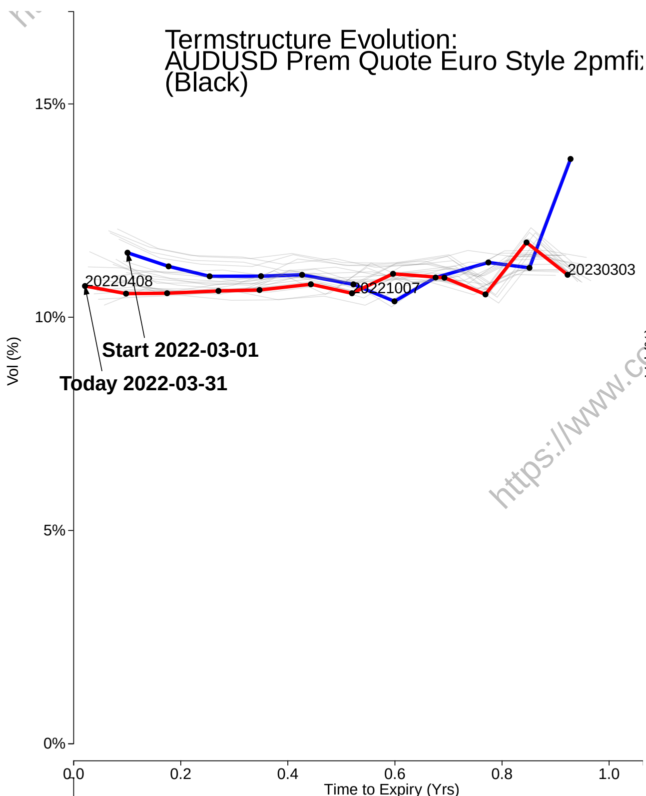

Front Month Skews:
Mexican Peso Options
(Black)
Today 2022-03-31
Start 2022-03-01

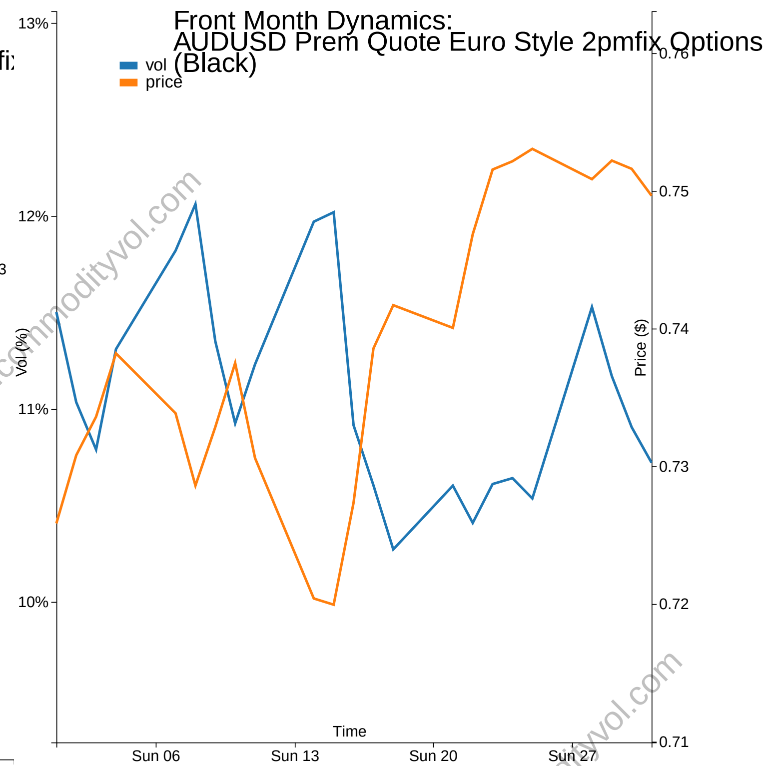

Termstructure Evolution:
CADUSD Prem Quote Euro Style 2pmfi
(Black)
Vol (%)
Time to Expiry (Yrs)
20220408
20221007
20230303
Start 2022-03-01
Today 2022-03-31

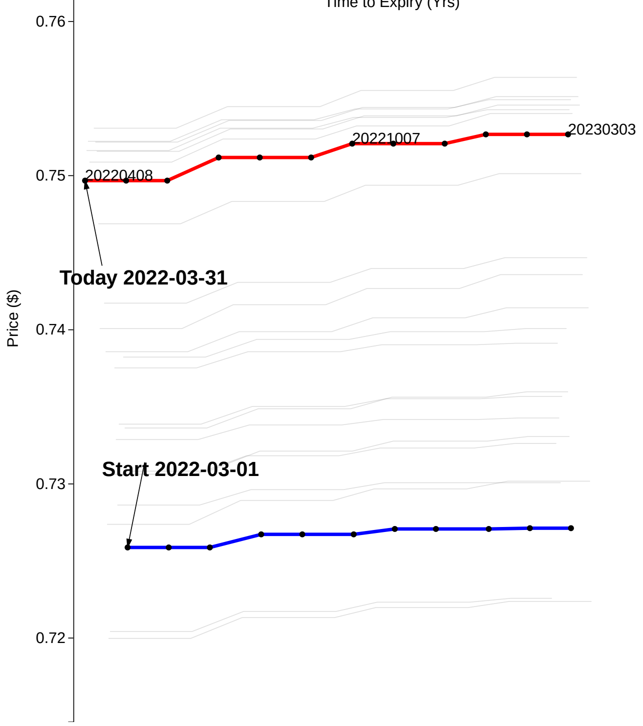

Front Month Dynamics:
CADUSD Prem Quote Euro Style 2pmfix Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

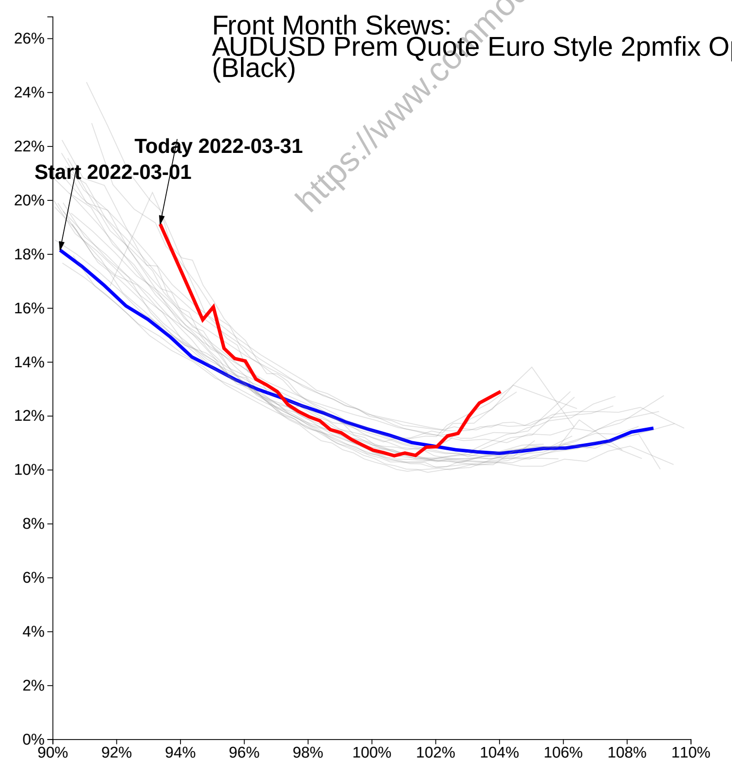

Price ($)
20220408
20221007
20230303
Today 2022-03-31
Start 2022-03-01

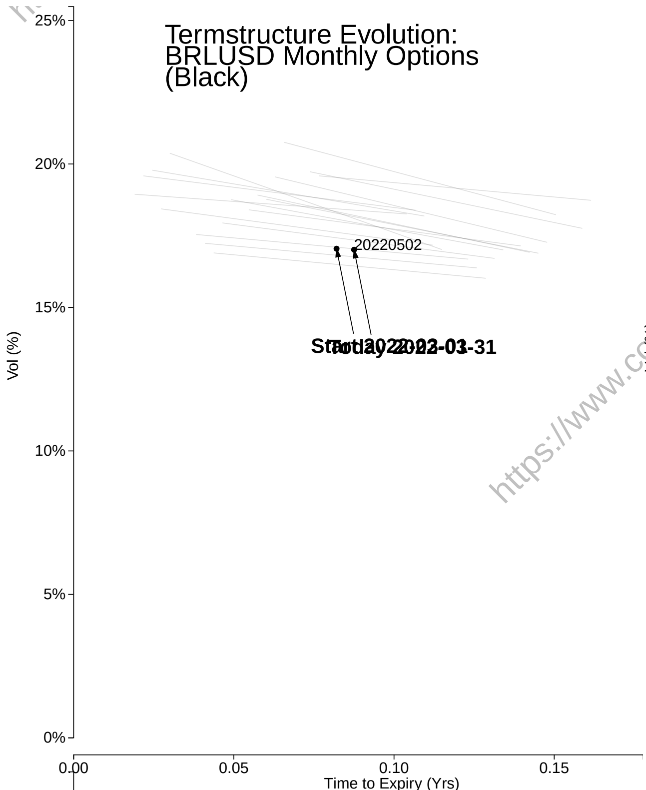

Front Month Skews:
CADUSD Prem Quote Euro Style 2pmfix O
(Black)
Today 2022-03-31
Start 2022-03-01

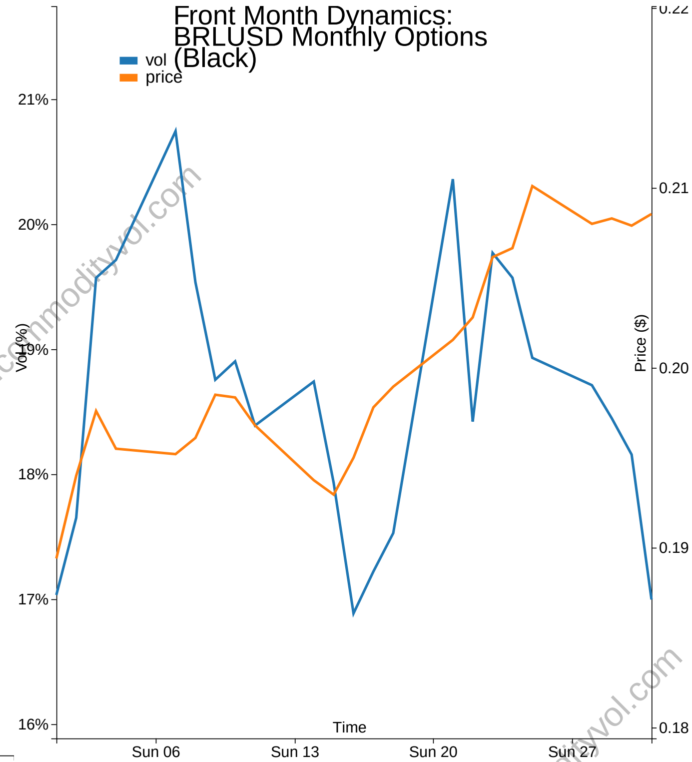

Termstructure Evolution:
AUDUSD Prem Quote Euro Style 2pmfi:
(Black)
Vol (%)
15%
10%
5%
0%
20220408
20221007
20230303
Start 2022-03-01
Today 2022-03-31
0.0
0.2
0.4
0.6
0.8
1.0
Time to Expiry (Yrs)

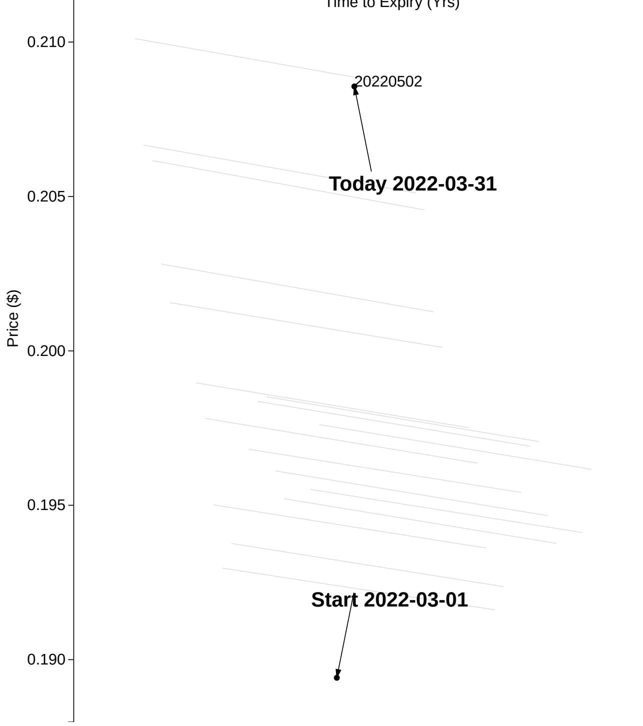

Front Month Dynamics:
AUDUSD Prem Quote Euro Style 2pmfix Options
(Black)
vol
price
Vol (%)
Price ($)
13%
12%
11%
10%
0.76
0.75
0.74
0.73
0.72
0.71
Time
Sun 06
Sun 13
Sun 20
Sun 27

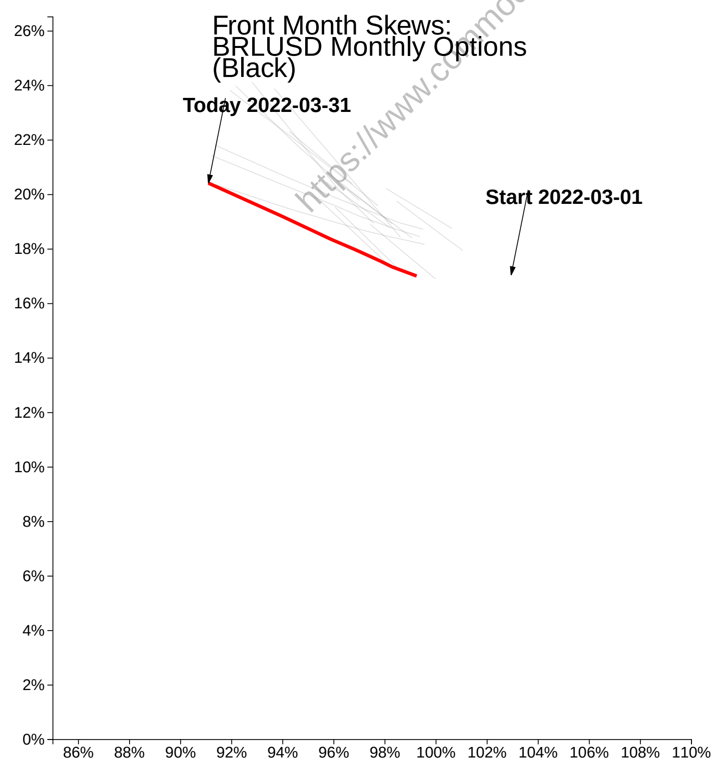

Price ($)
0.76
0.75
0.74
0.73
0.72
20220408
20221007
20230303
Today 2022-03-31
Start 2022-03-01

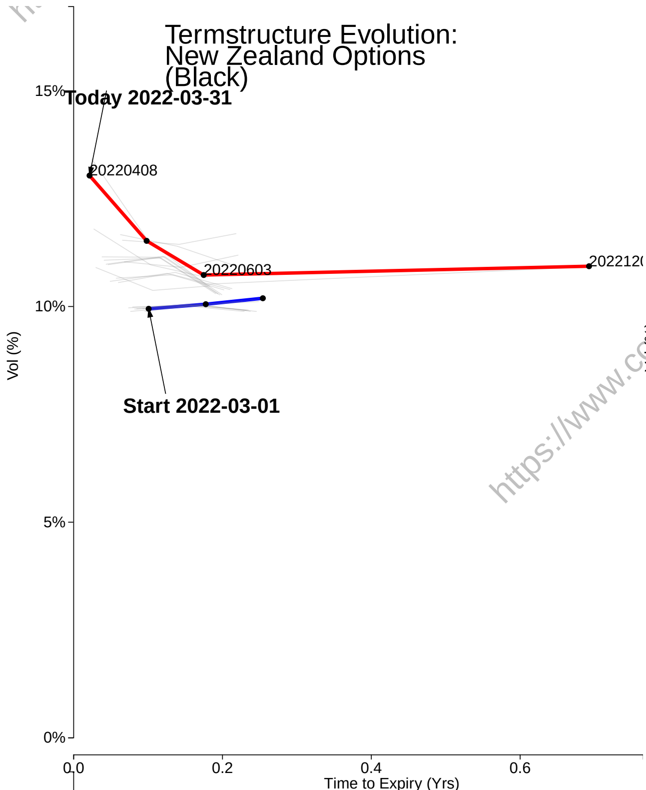

Front Month Skews:
AUDUSD Prem Quote Euro Style 2pmfix O
(Black)
Today 2022-03-31
Start 2022-03-01
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
90%
92%
94%
96%
98%
100%
102%
104%
106%
108%
110%

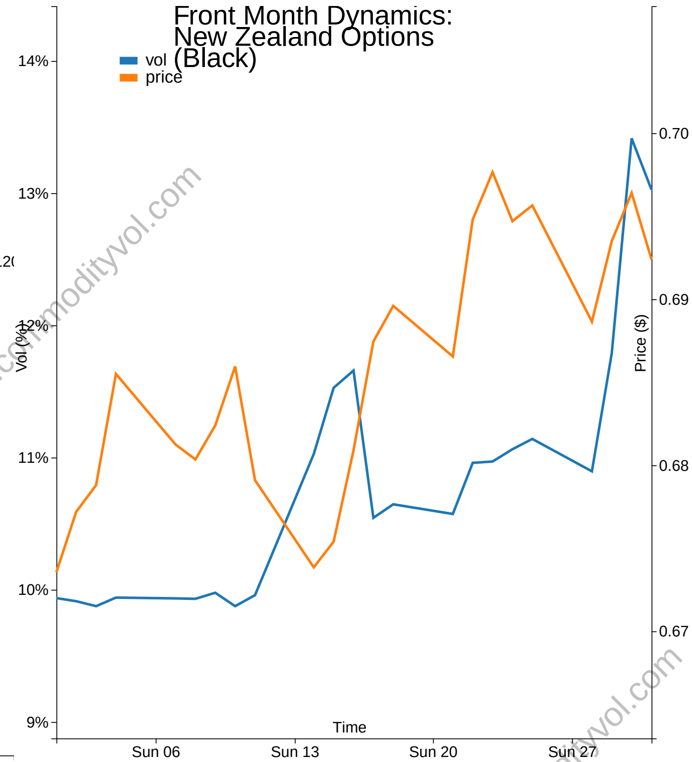

Termstructure Evolution:
BRLUSD Monthly Options
(Black)
20220502
Start 2022-03-01
Today 2022-03-31
Vol (%)
25%
20%
15%
10%
5%
0%
0.00
0.05
0.10
0.15
Time to Expiry (Yrs)

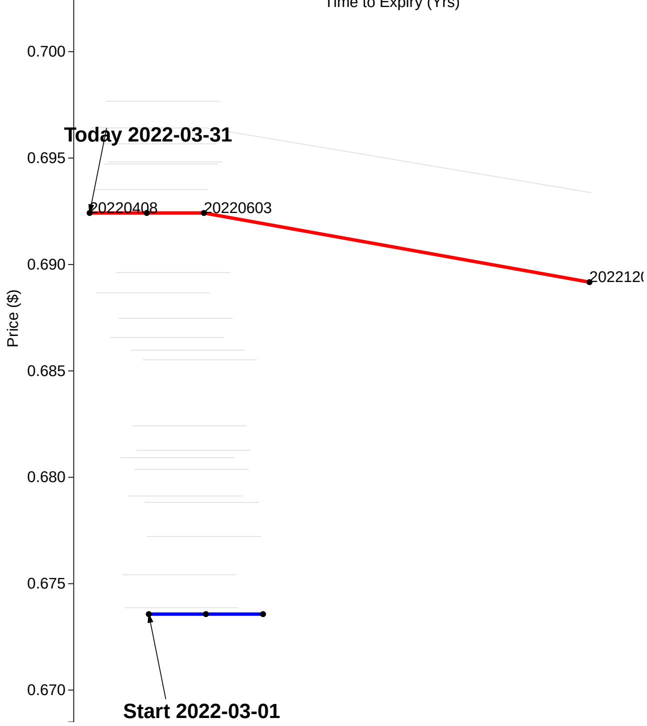

Front Month Dynamics:
BRLUSD Monthly Options
(Black)
vol
price
Vol (%)
21%
20%
19%
18%
17%
16%
Price ($)
0.22
0.21
0.20
0.19
0.18
Time
Sun 06
Sun 13
Sun 20
Sun 27

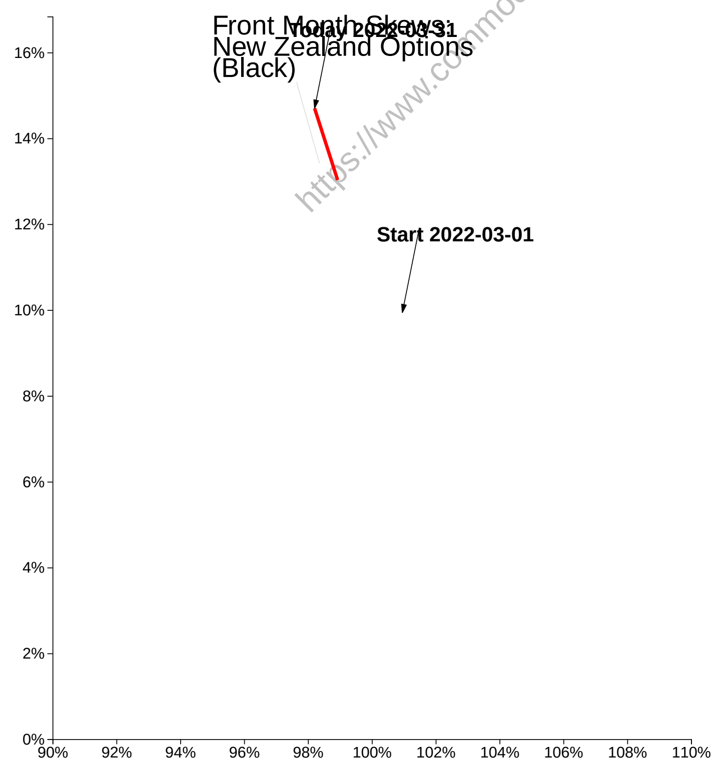

20220502
Today 2022-03-31
Start 2022-03-01
Price ($)
0.210
0.205
0.200
0.195
0.190

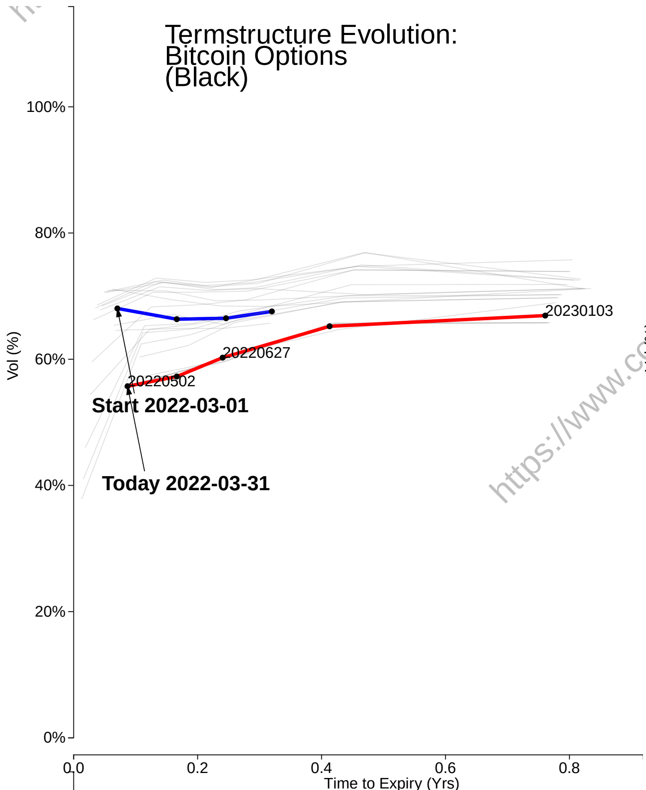

Front Month Skews:
BRLUSD Monthly Options
(Black)
Today 2022-03-31
Start 2022-03-01
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
86%
88%
90%
92%
94%
96%
98%
100%
102%
104%
106%
108%
110%

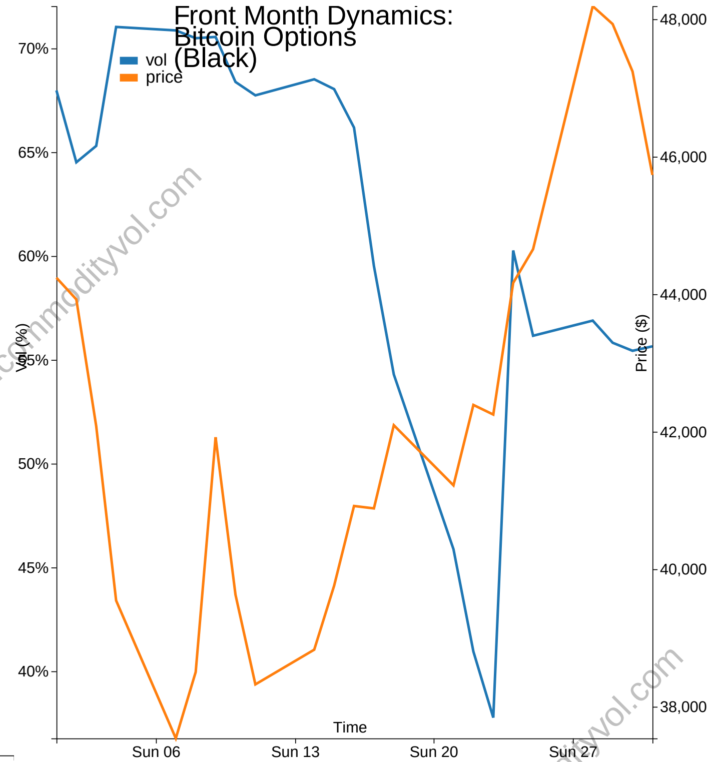

Termstructure Evolution:
New Zealand Options
(Black)
Today 2022-03-31
20220408
20220603
Start 2022-03-01
15%
10%
5%
0%
Vol (%)
0.0
0.2
0.4
0.6
Time to Expiry (Yrs)

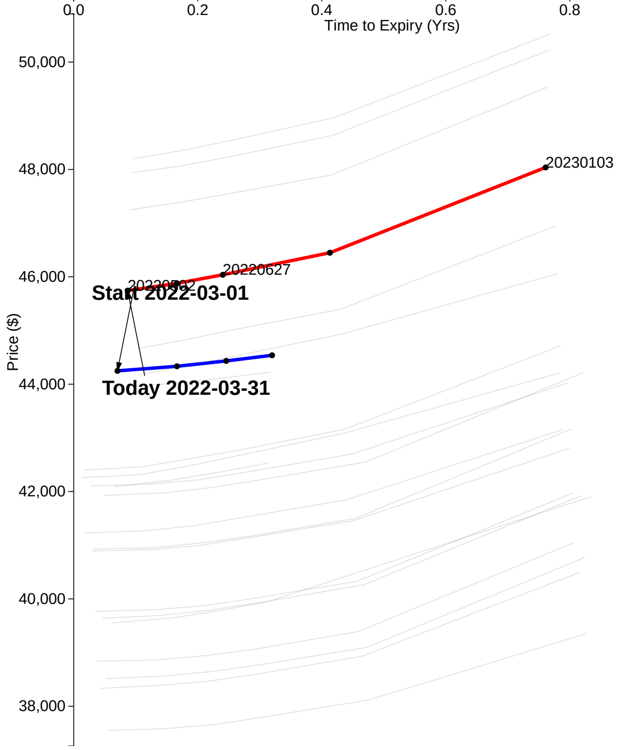

Front Month Dynamics:
New Zealand Options
(Black)
vol
price
14%
13%
12%
11%
10%
9%
Vol (%)
0.70
0.69
0.68
0.67
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

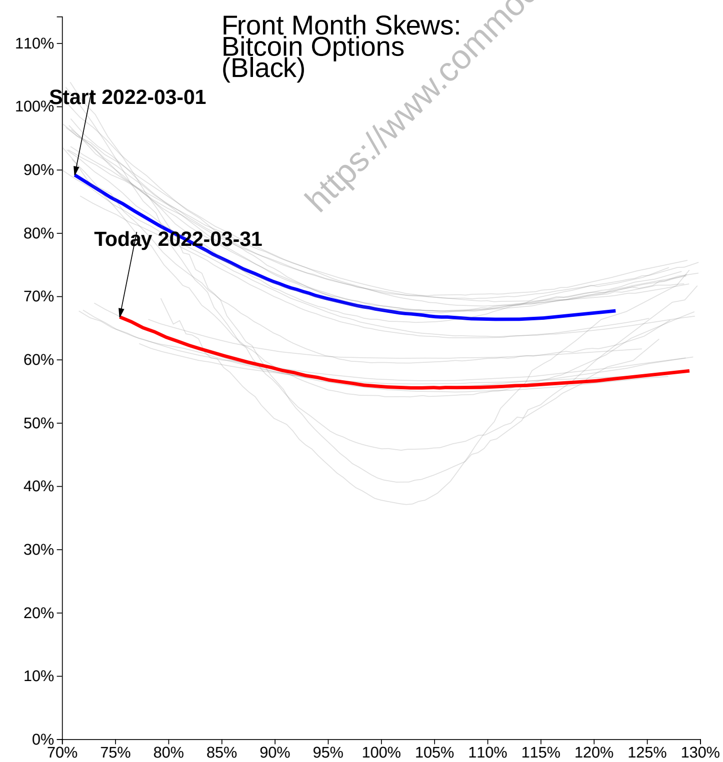

Today 2022-03-31
20220408
20220603
Start 2022-03-01
0.700
0.695
0.690
0.685
0.680
0.675
0.670
Price ($)


Front Month Skews:
New Zealand Options
(Black)
Today 2022-03-31
Start 2022-03-01
16%
14%
12%
10%
8%
6%
4%
2%
0%
90%
92%
94%
96%
98%
100%
102%
104%
106%
108%
110%

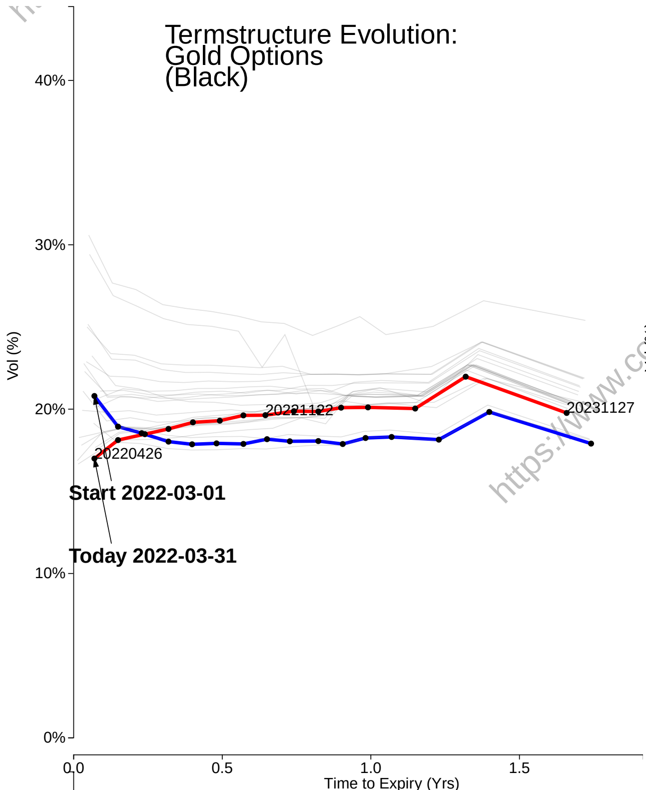

Termstructure Evolution:
Bitcoin Options
(Black)
Vol (%)
Time to Expiry (Yrs)
20230103
20220627
20220502
Start 2022-03-01
Today 2022-03-31
https://www.commodityvol.com

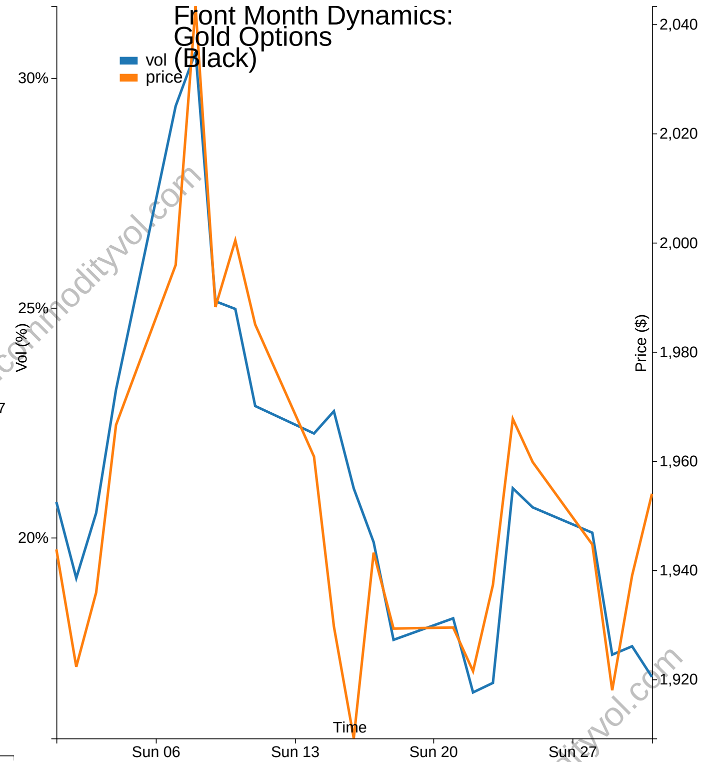

Front Month Dynamics:
Bitcoin Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27
https://www.commodityvol.com

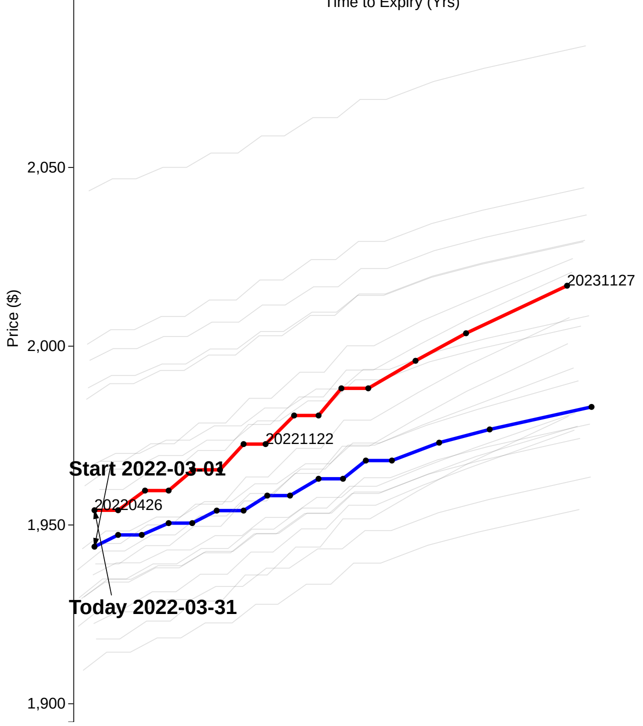

Price ($)
20230103
20220627
20220502
Start 2022-03-01
Today 2022-03-31

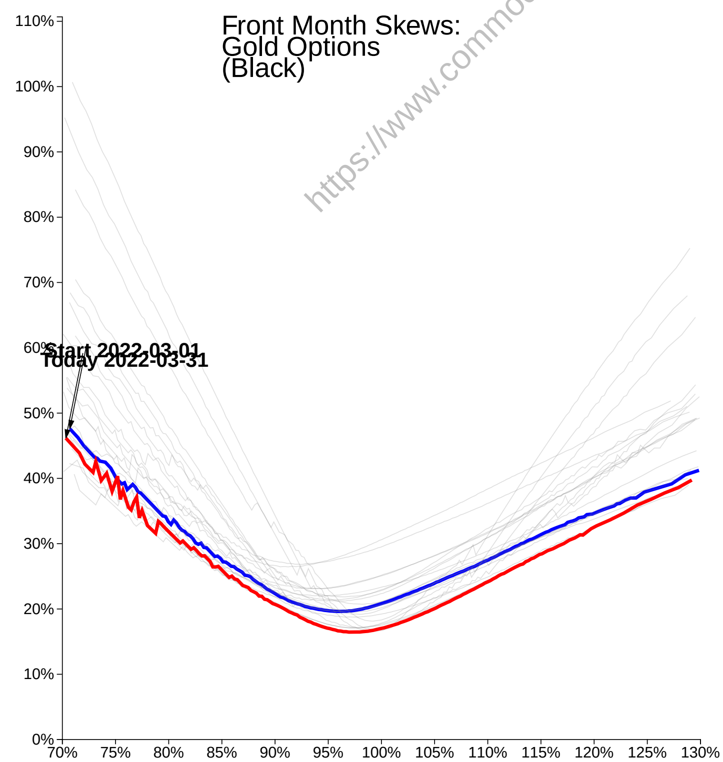

Front Month Skews:
Bitcoin Options
(Black)
Start 2022-03-01
Today 2022-03-31
https://www.commodityvol.com

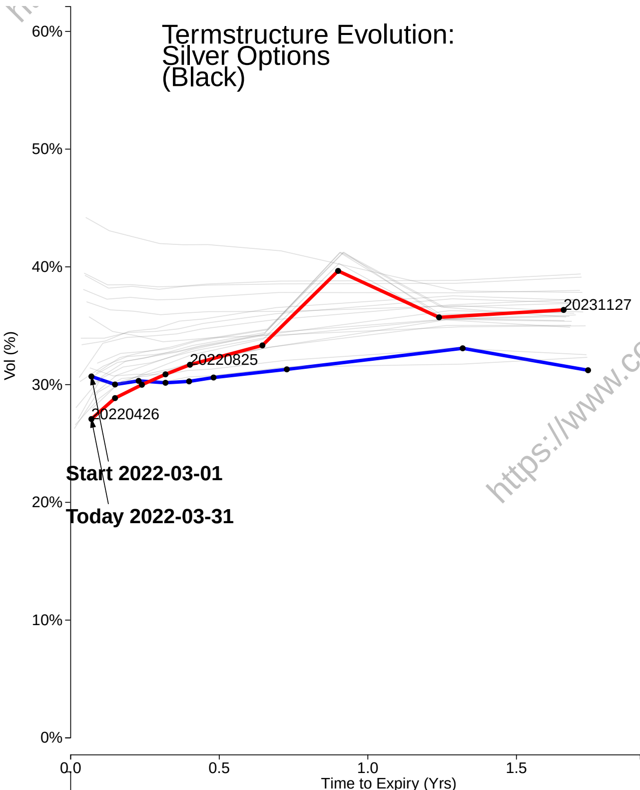
Metals, Materials and so forth

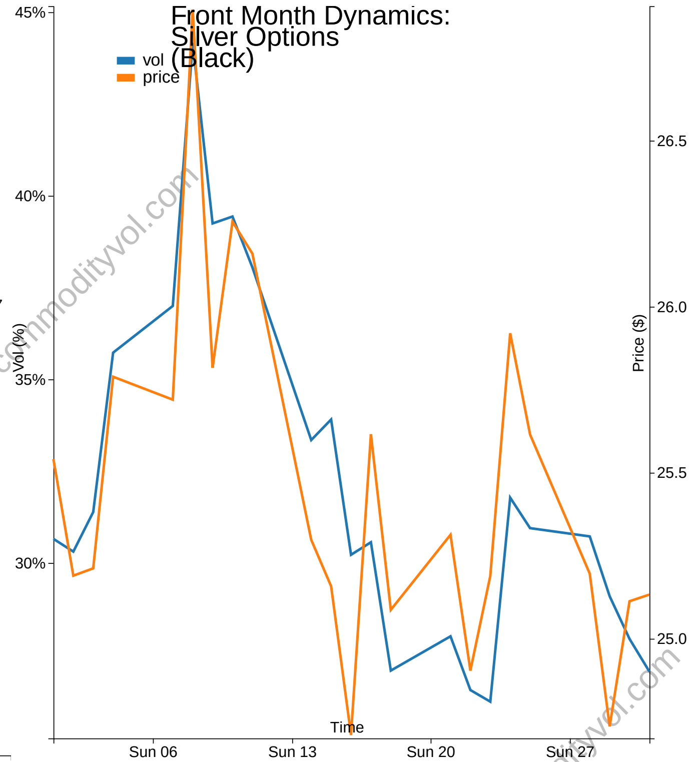

Termstructure Evolution:
Gold Options
(Black)
Vol (%)
40%
30%
20%
10%
0%
20221122
20231127
20220426
Start 2022-03-01
Today 2022-03-31
0.0
0.5
1.0
1.5
Time to Expiry (Yrs)

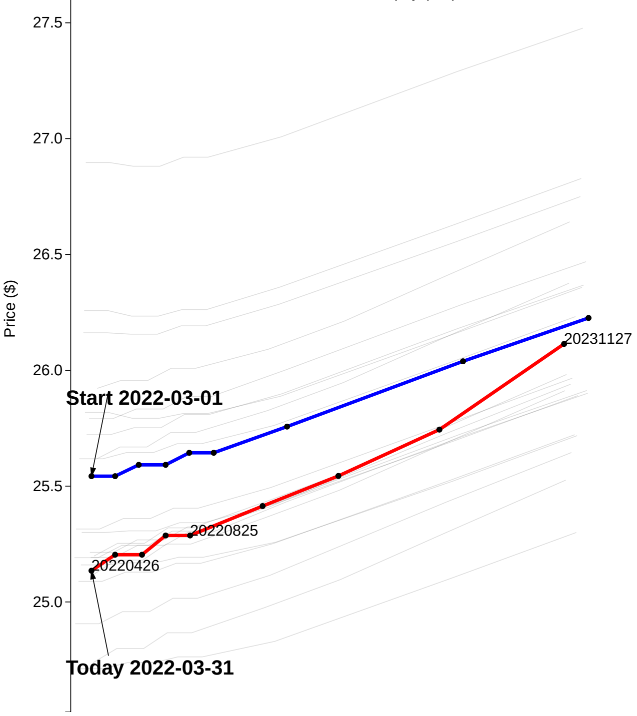

Front Month Dynamics:
Gold Options
(Black)
vol
price
Vol (%)
30%
25%
20%
Price ($)
2,040
2,020
2,000
1,980
1,960
1,940
1,920
Time
Sun 06
Sun 13
Sun 20
Sun 27

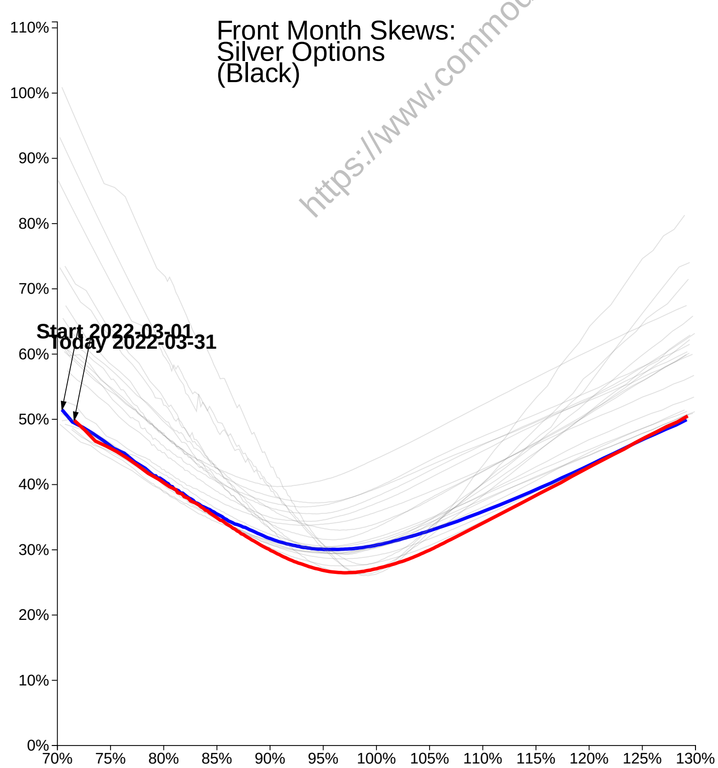

Price ($)
2,050
2,000
1,950
1,900
20231127
20221122
Start 2022-03-01
20220426
Today 2022-03-31

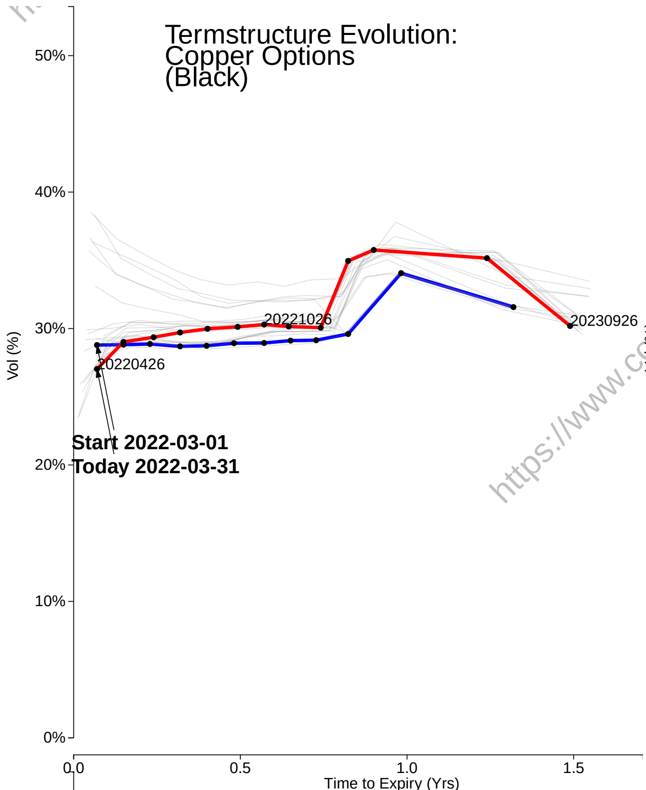

Front Month Skews:
Gold Options
(Black)
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Start 2022-03-01
Today 2022-03-31
70%
75%
80%
85%
90%
95%
100%
105%
110%
115%
120%
125%
130%

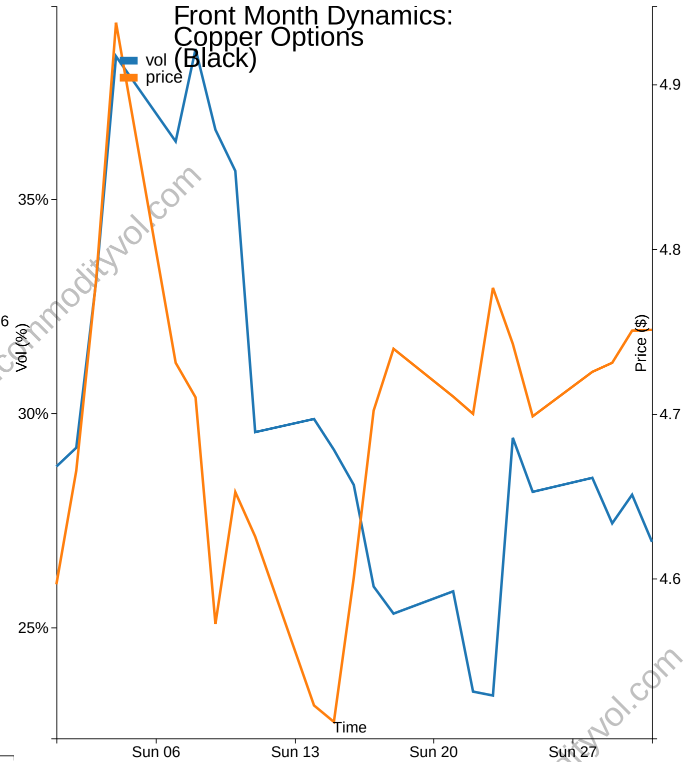

Termstructure Evolution:
Silver Options
(Black)
Vol (%)
Time to Expiry (Yrs)
20231127
20220825
20220426
Start 2022-03-01
Today 2022-03-31

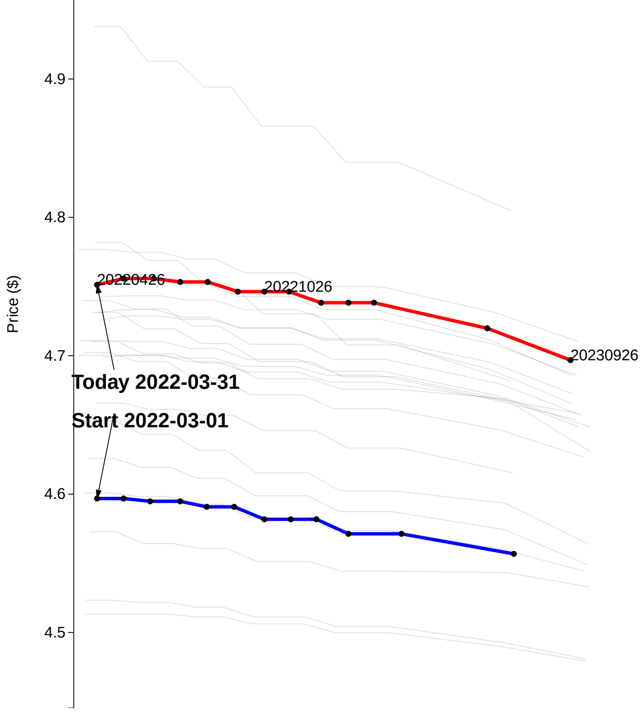

Front Month Dynamics:
Silver Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

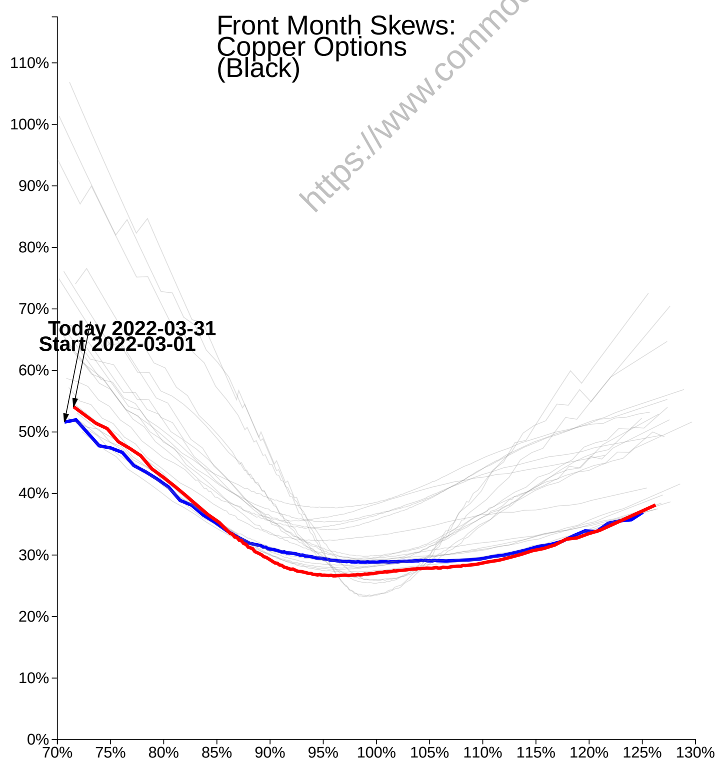

Price ($)
Start 2022-03-01
Today 2022-03-31
20231127
20220825
20220426

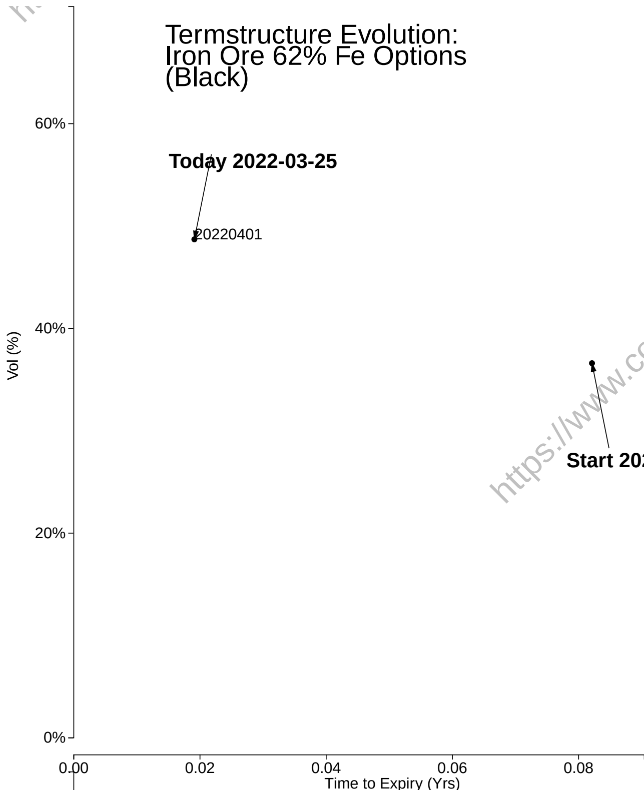

Front Month Skews:
Silver Options
(Black)
Start 2022-03-01
Today 2022-03-31

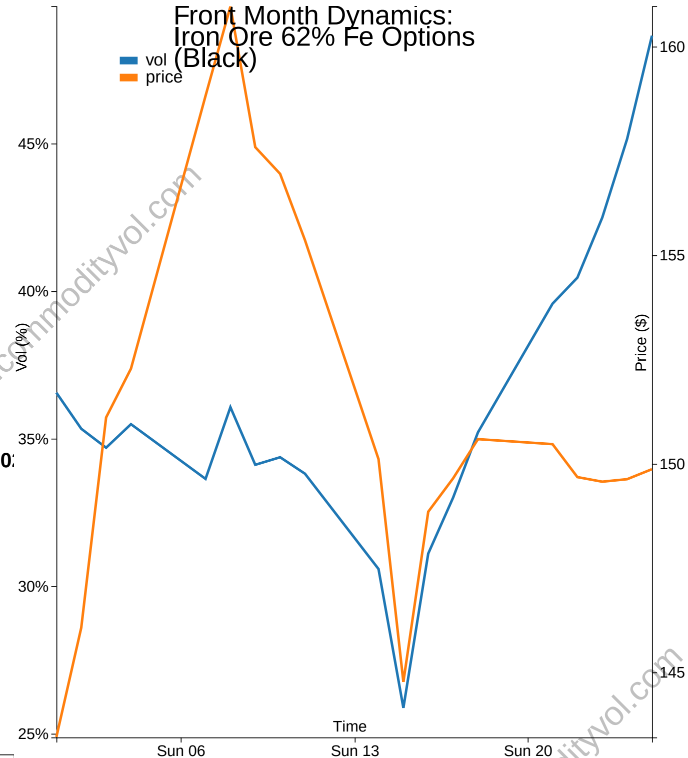

Termstructure Evolution:
Copper Options
(Black)
Vol (%)
Time to Expiry (Yrs)
20220426
20221026
20230926
Start 2022-03-01
Today 2022-03-31

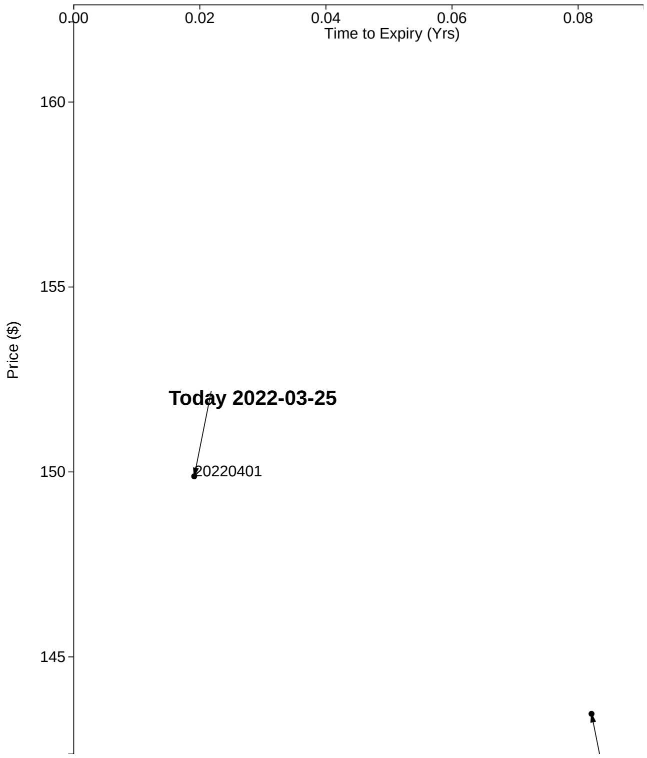

Front Month Dynamics:
Copper Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

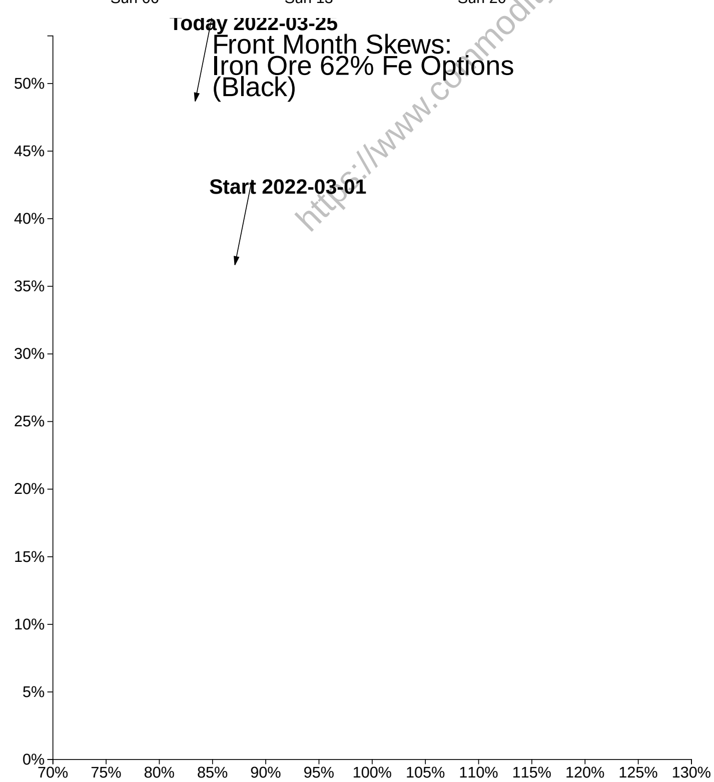

Price ($)
20220426
20221026
20230926
Today 2022-03-31
Start 2022-03-01

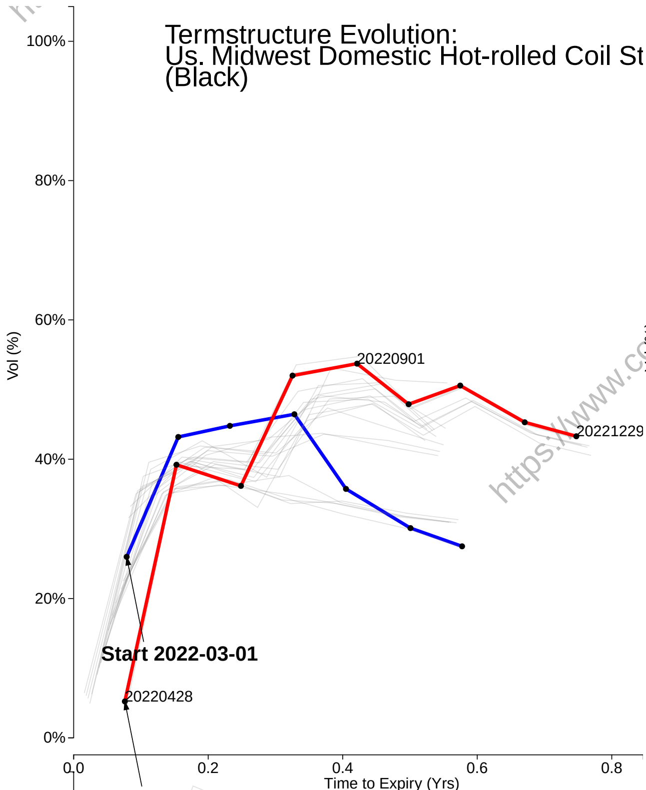

Front Month Skews:
Copper Options
(Black)
Today 2022-03-31
Start 2022-03-01

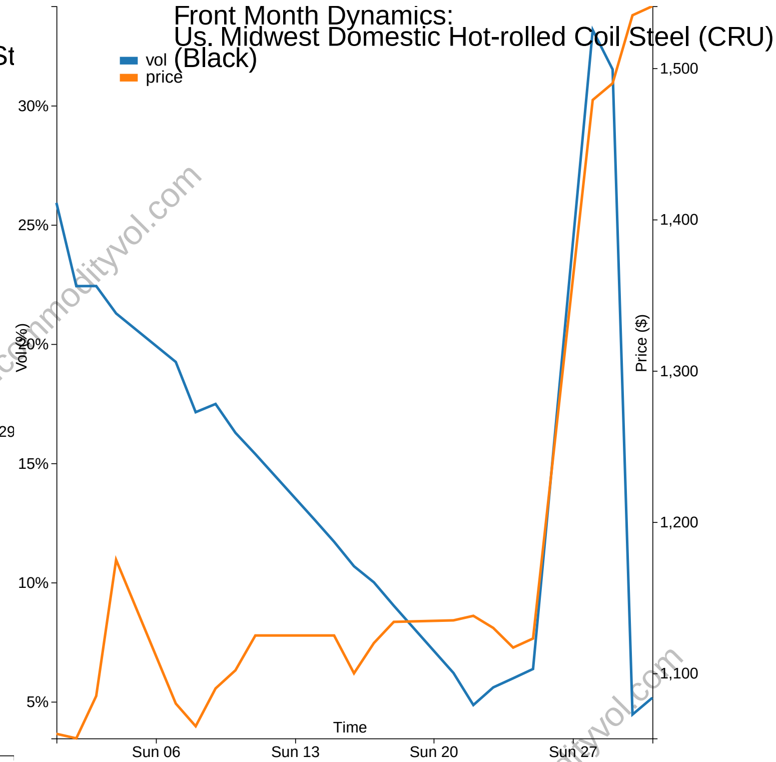

Termstructure Evolution:
Iron Ore 62% Fe Options
(Black)
Today 2022-03-25
20220401
Start 202
Vol (%)
60%
40%
20%
0%
0.00
0.02
0.04
0.06
0.08
Time to Expiry (Yrs)

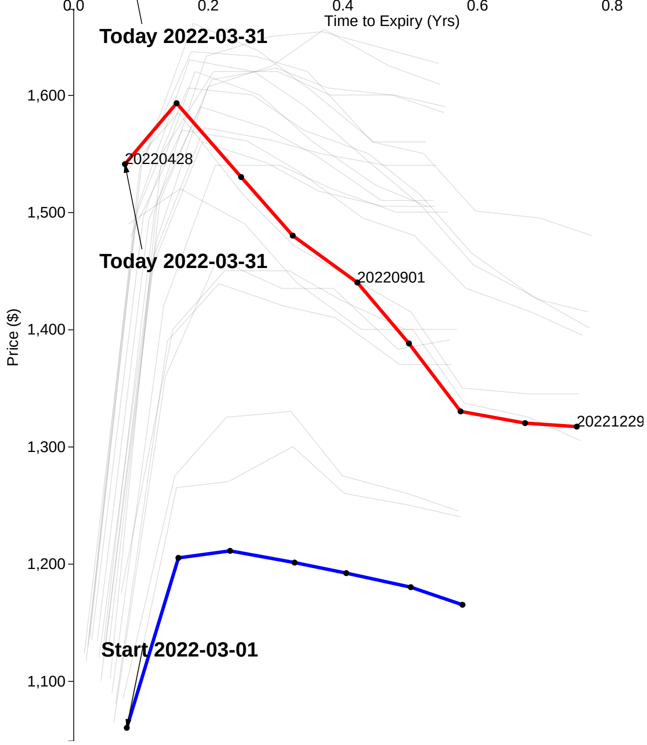

Front Month Dynamics:
Iron Ore 62% Fe Options
(Black)
vol
price
Vol (%)
Price ($)
45%
40%
35%
30%
25%
160
155
150
145
Sun 06
Sun 13
Sun 20
Time

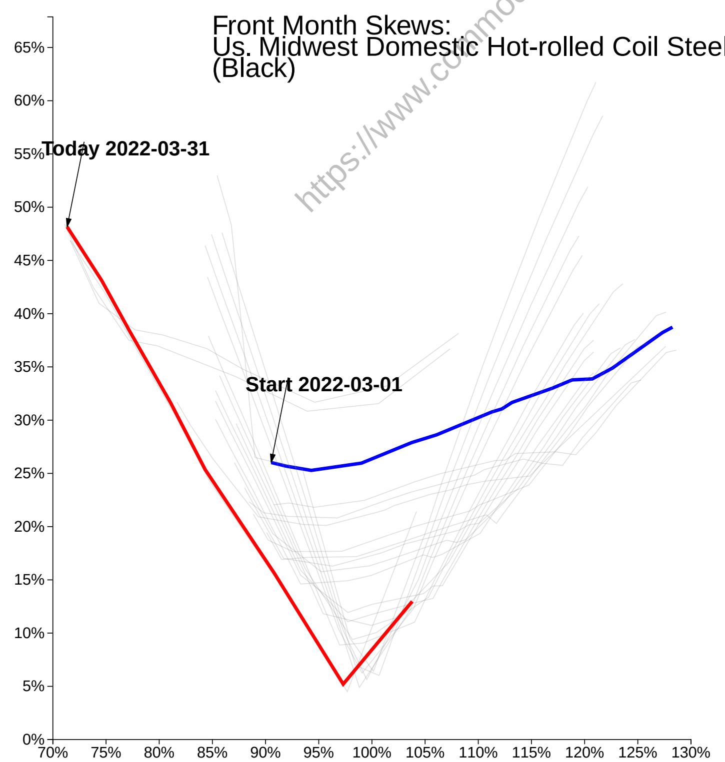

Today 2022-03-25
20220401
Price ($)
160
155
150
145

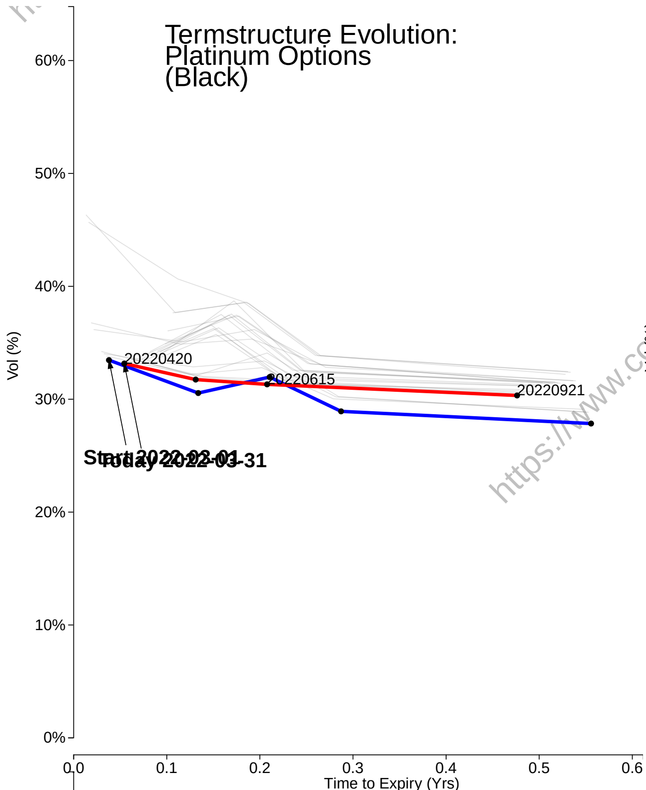

Today 2022-03-25
Front Month Skews:
Iron Ore 62% Fe Options
(Black)
Start 2022-03-01
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
70%
75%
80%
85%
90%
95%
100%
105%
110%
115%
120%
125%
130%

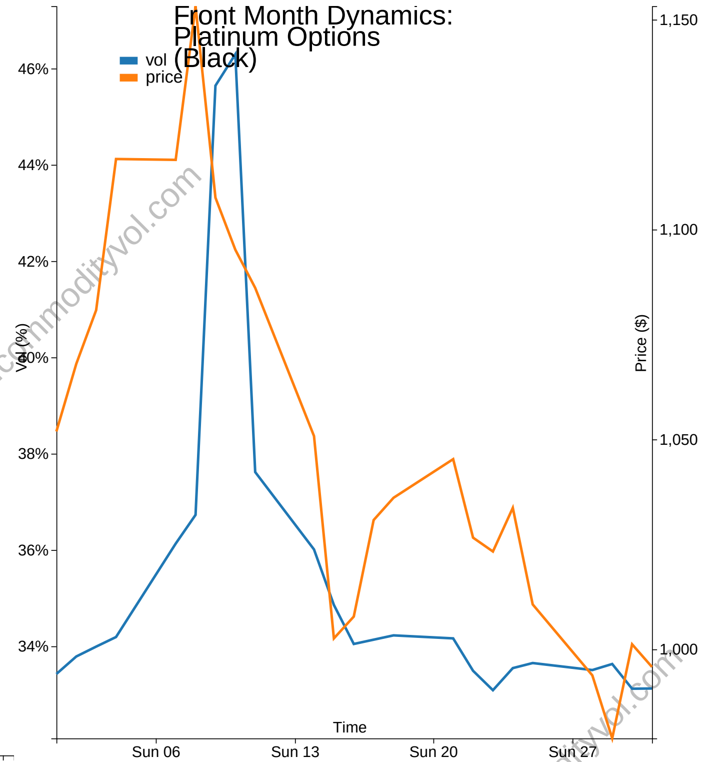

Termstructure Evolution:
Us. Midwest Domestic Hot-rolled Coil St
(Black)
Vol (%)
Time to Expiry (Yrs)
20220901
20221229
20220428
Start 2022-03-01
Today 2022-03-31

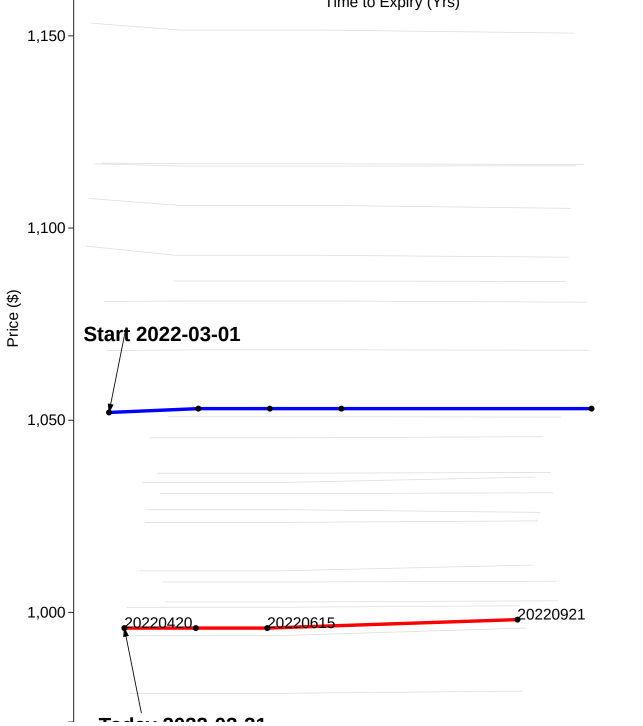

Front Month Dynamics:
Us. Midwest Domestic Hot-rolled Coil Steel (CRU)
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

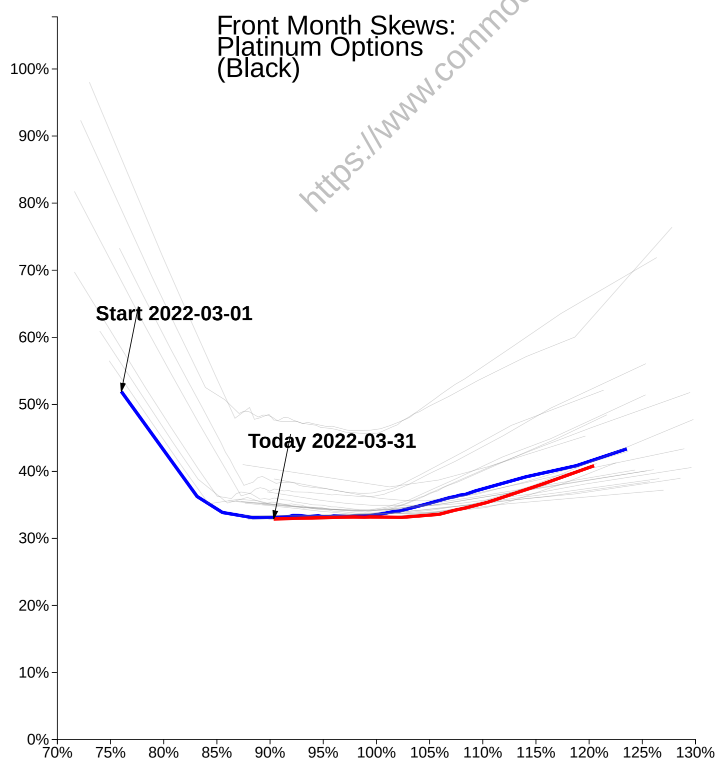

Price ($)
20220428
20220901
20221229
Today 2022-03-31
Start 2022-03-01

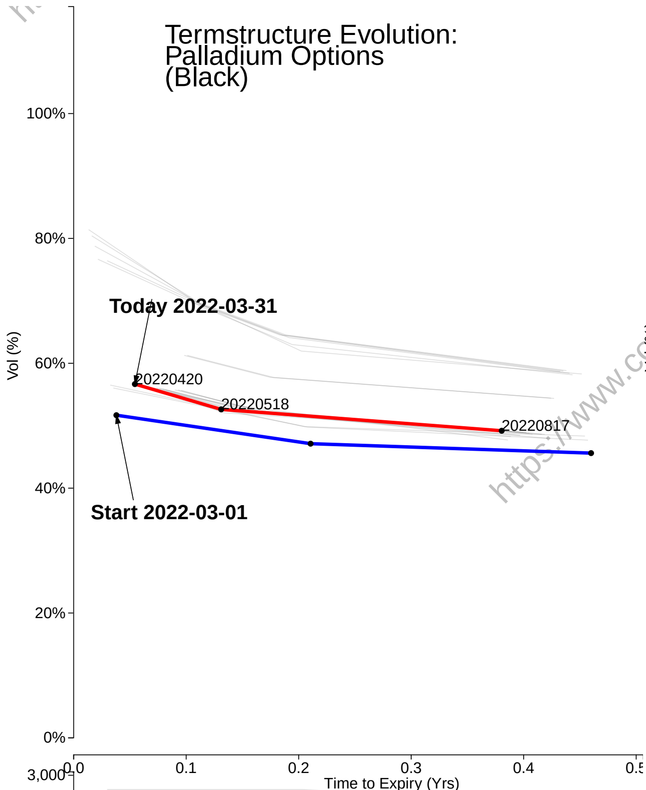

Front Month Skews:
Us. Midwest Domestic Hot-rolled Coil Steel
(Black)
Today 2022-03-31
Start 2022-03-01

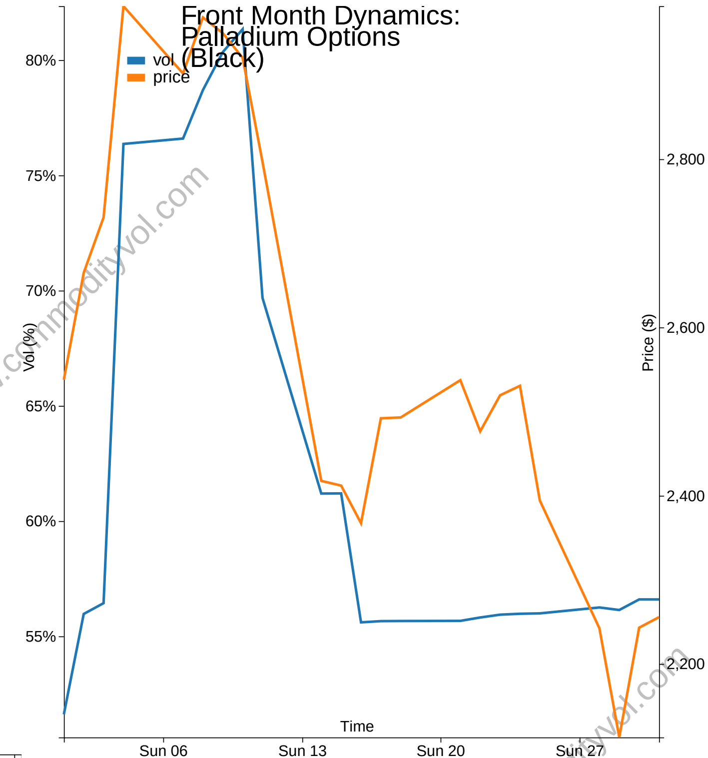

Termstructure Evolution:
Platinum Options
(Black)
Vol (%)
Time to Expiry (Yrs)
20220420
20220615
20220921
Start 2022-03-01
Today 2022-03-31

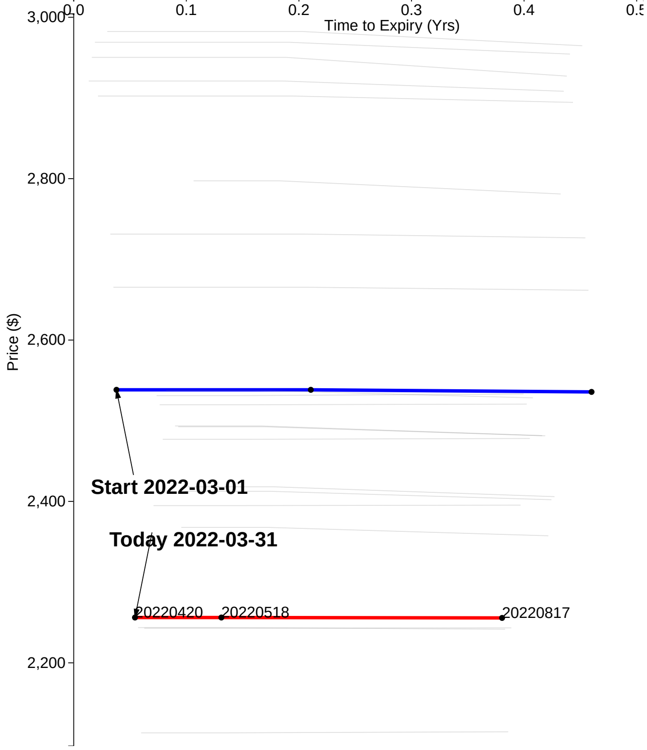

Front Month Dynamics:
Platinum Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

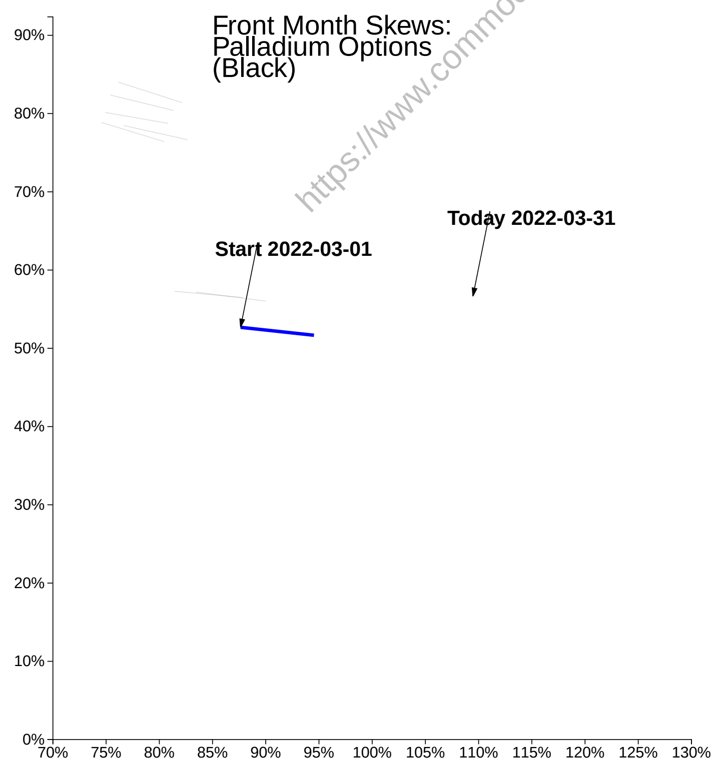

Price ($)
Start 2022-03-01
20220420
20220615
20220921

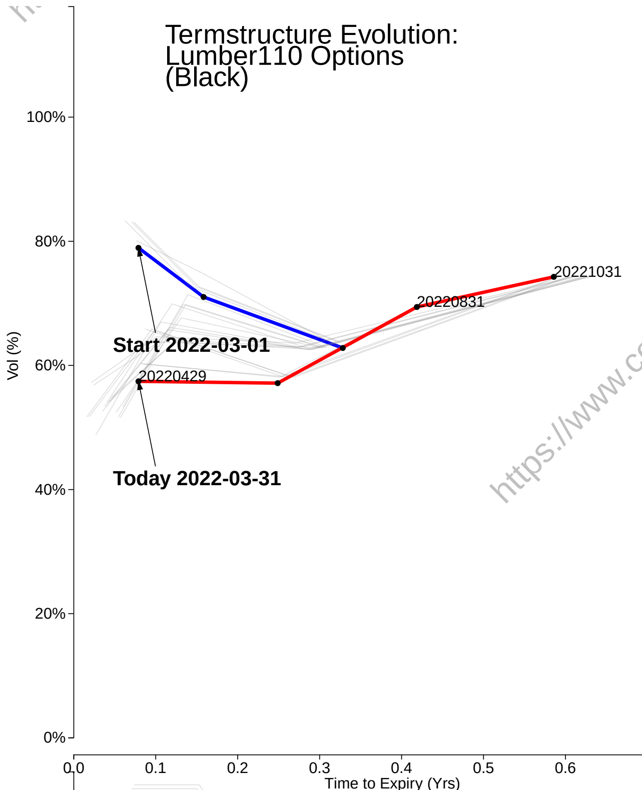

Front Month Skews:
Platinum Options
(Black)
Start 2022-03-01
Today 2022-03-31

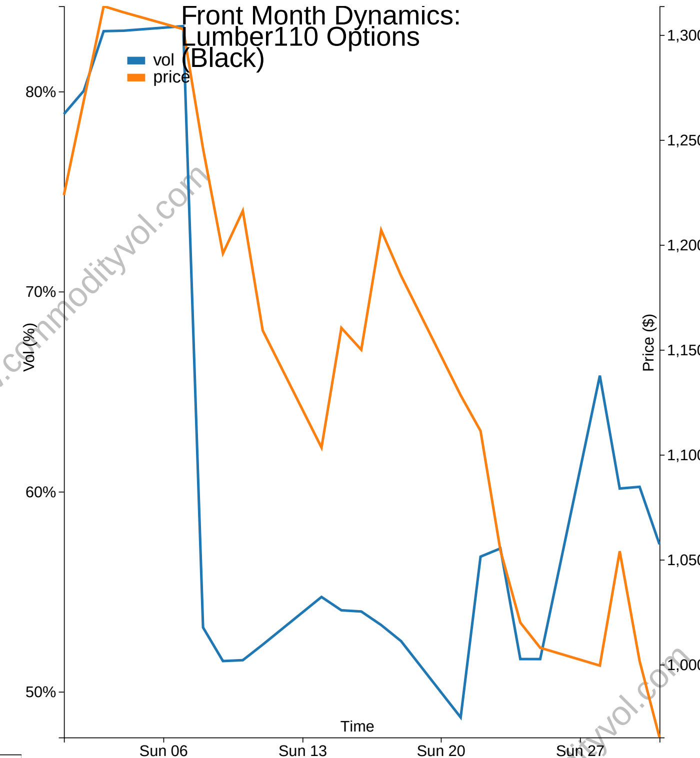

Termstructure Evolution:
Palladium Options
(Black)
Today 2022-03-31
Start 2022-03-01
20220420
20220518
20220817
Vol (%)
Time to Expiry (Yrs)
0%
20%
40%
60%
80%
100%
0.0
0.1
0.2
0.3
0.4
0.5

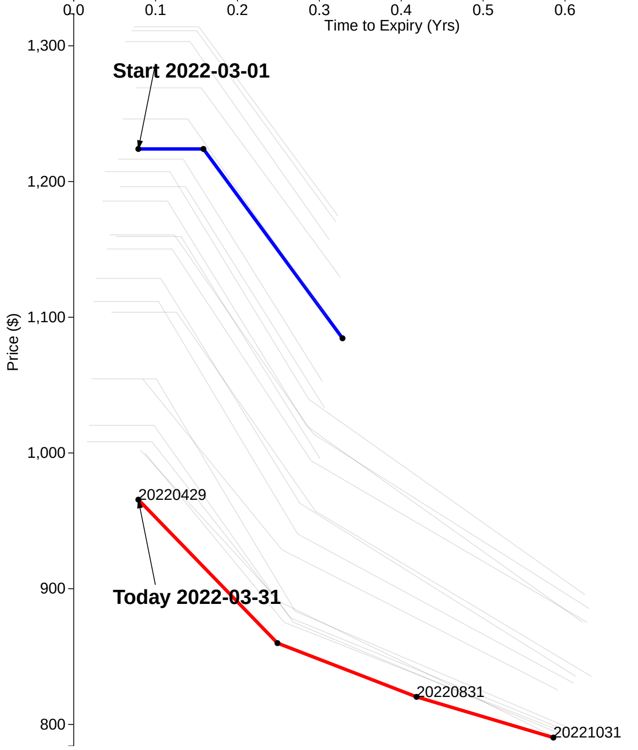

Front Month Dynamics:
Palladium Options
(Black)
vol
price
Vol (%)
Price ($)
Time
55%
60%
65%
70%
75%
80%
2,200
2,400
2,600
2,800
Sun 06
Sun 13
Sun 20
Sun 27

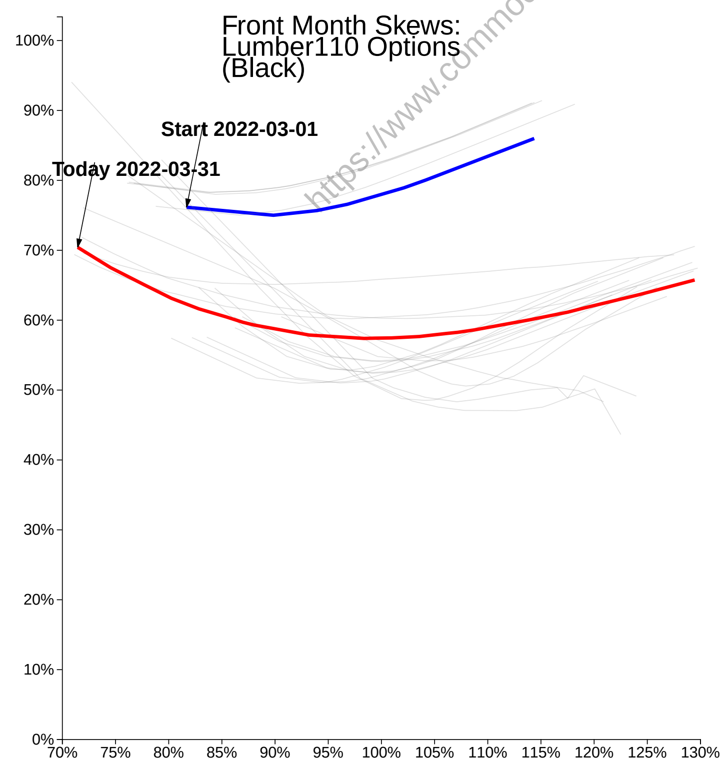

Price ($)
3,000
2,800
2,600
2,400
2,200
Start 2022-03-01
Today 2022-03-31
20220420
20220518
20220817


Front Month Skews:
Palladium Options
(Black)
Start 2022-03-01
Today 2022-03-31
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
70%
75%
80%
85%
90%
95%
100%
105%
110%
115%
120%
125%
130%

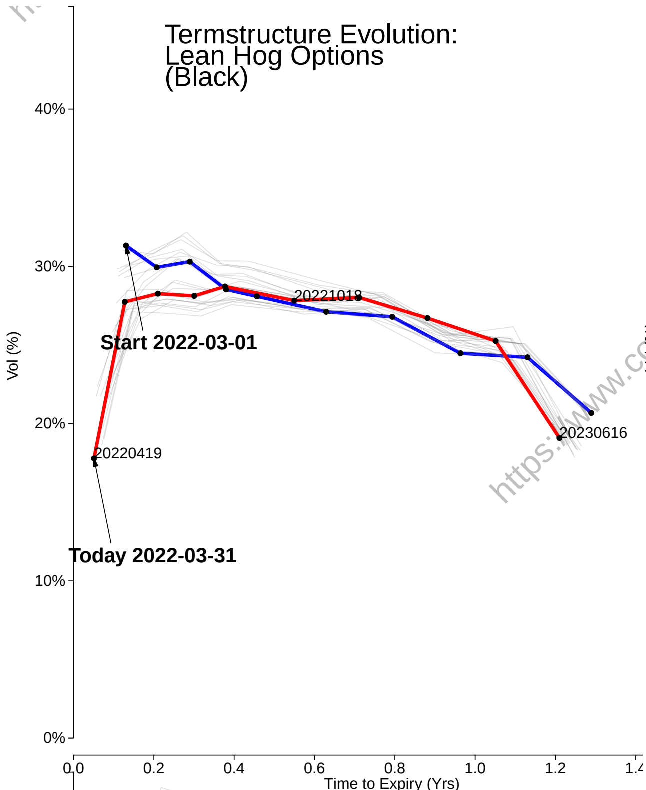

Termstructure Evolution:
Lumber110 Options
(Black)
Start 2022-03-01
Today 2022-03-31
20220429
20220831
20221031
Vol (%)
Time to Expiry (Yrs)

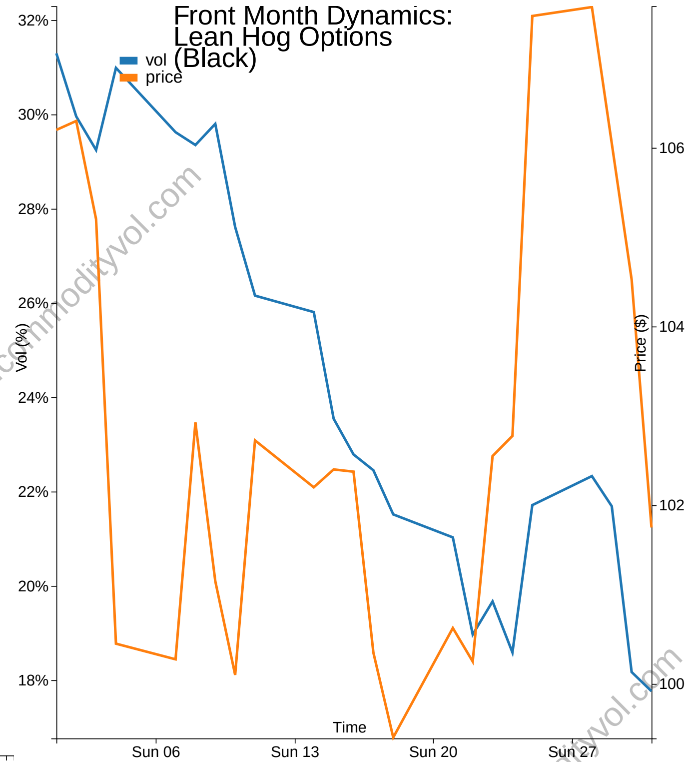

Front Month Dynamics:
Lumber110 Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

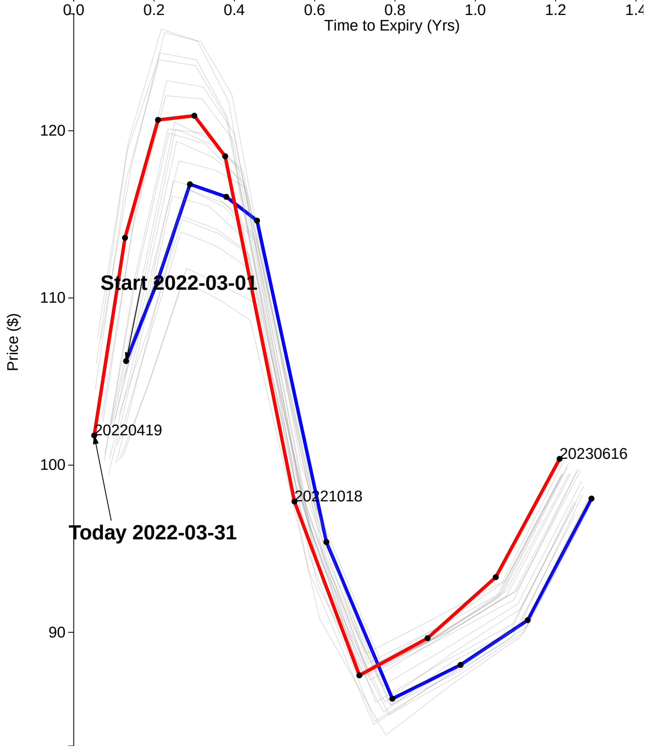

Start 2022-03-01
Today 2022-03-31
20220429
20220831
20221031
Price ($)

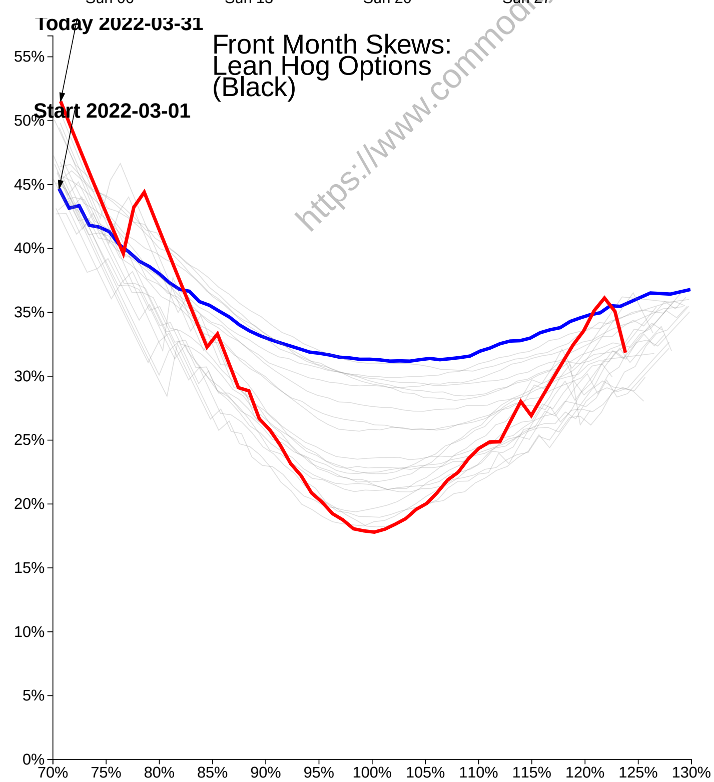

Front Month Skews:
Lumber110 Options
(Black)
Start 2022-03-01
Today 2022-03-31

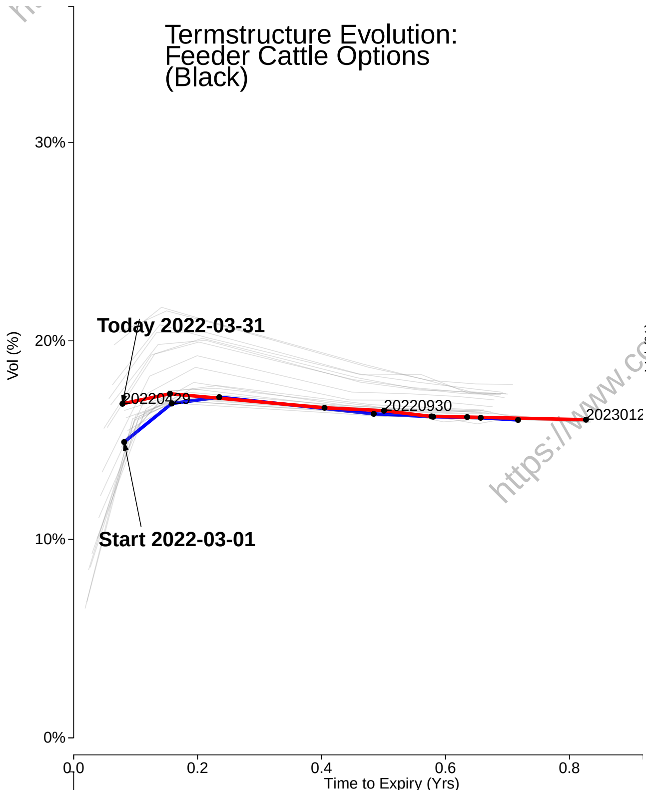
Proteins, Meats and so forth

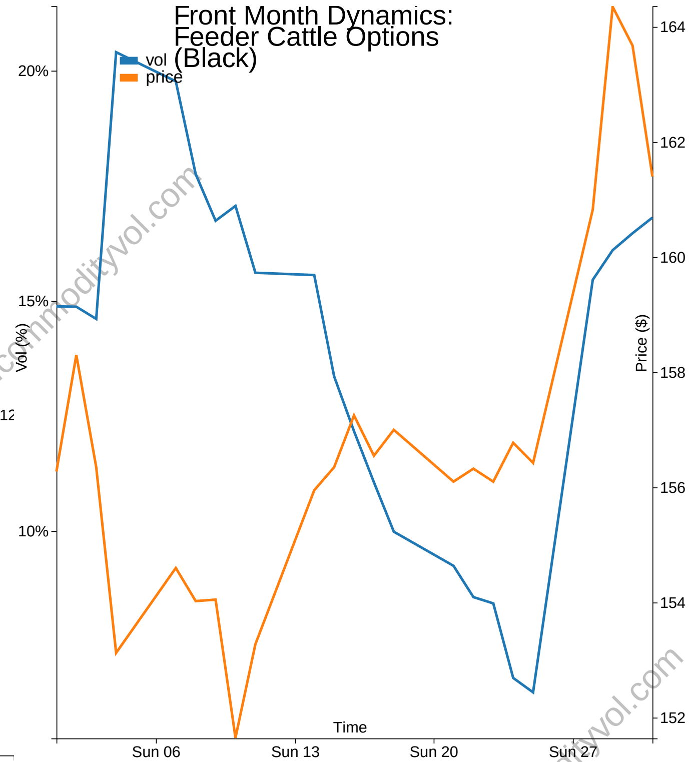

Termstructure Evolution:
Lean Hog Options
(Black)
Vol (%)
Time to Expiry (Yrs)
Start 2022-03-01
Today 2022-03-31
20220419
20221018
20230616
https://www.commodityvol.com

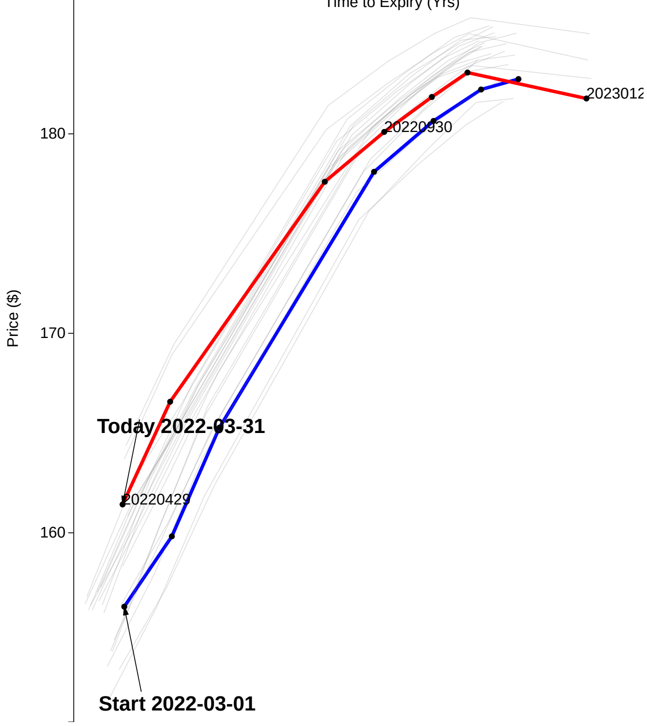

Front Month Dynamics:
Lean Hog Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

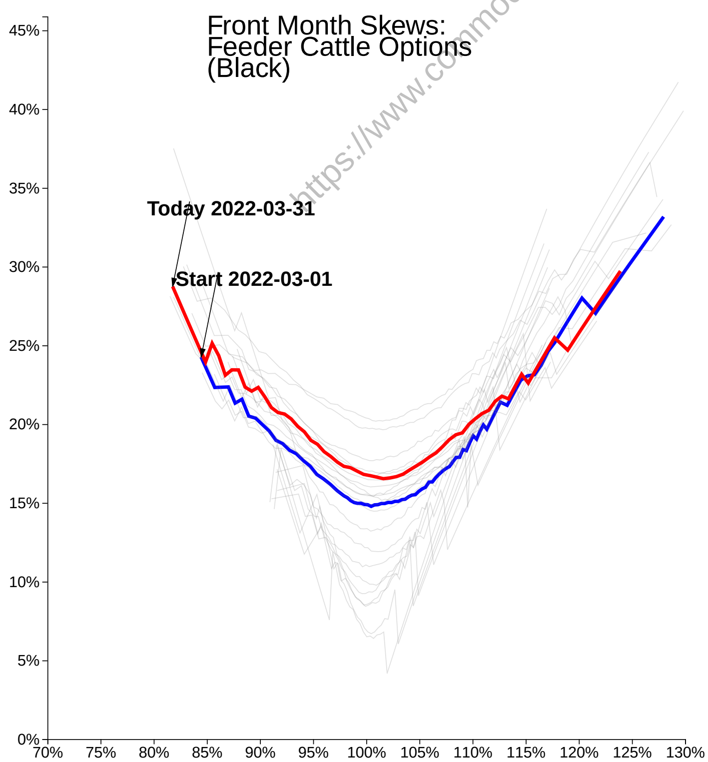

Price ($)
Start 2022-03-01
Today 2022-03-31
20220419
20221018
20230616

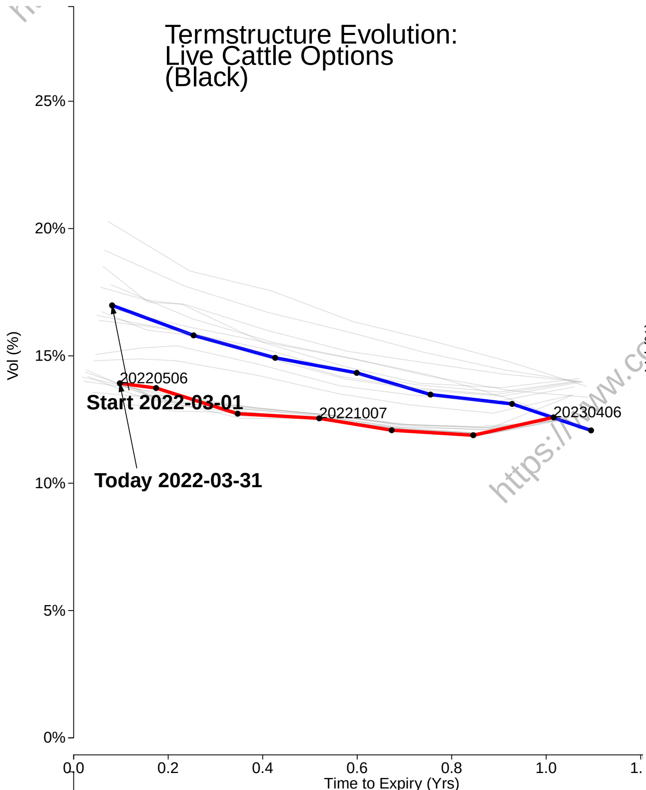

Front Month Skews:
Lean Hog Options
(Black)
Today 2022-03-31
Start 2022-03-01
https://www.commodityvol.com

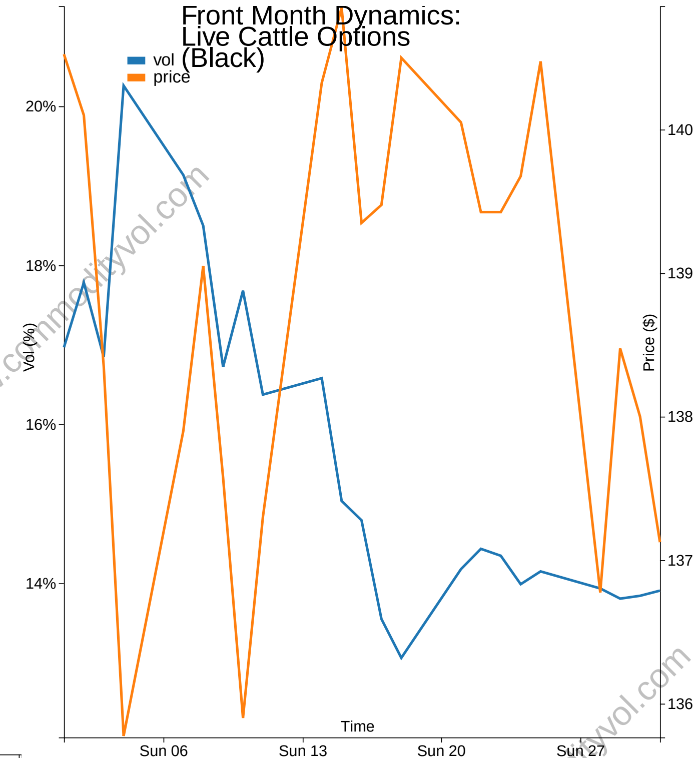

Termstructure Evolution:
Feeder Cattle Options
(Black)
Today 2022-03-31
Start 2022-03-01
20220429
20220930
2023012
Vol (%)
Time to Expiry (Yrs)

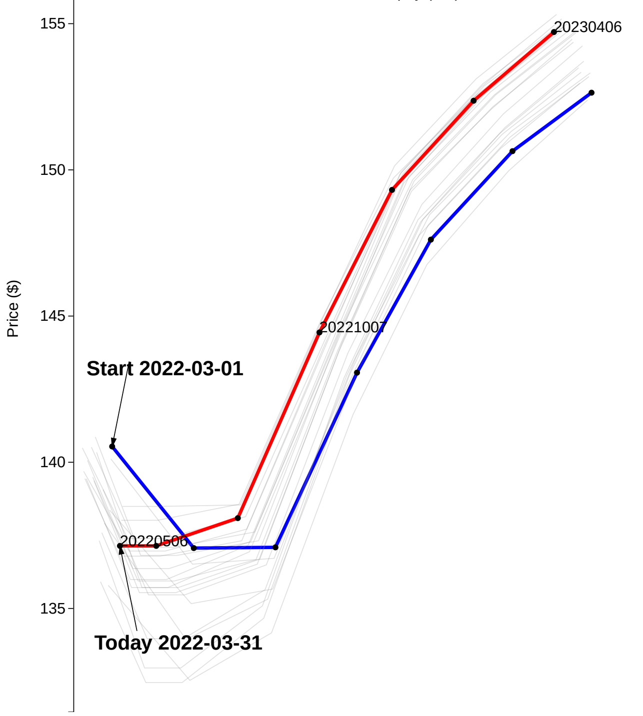

Front Month Dynamics:
Feeder Cattle Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

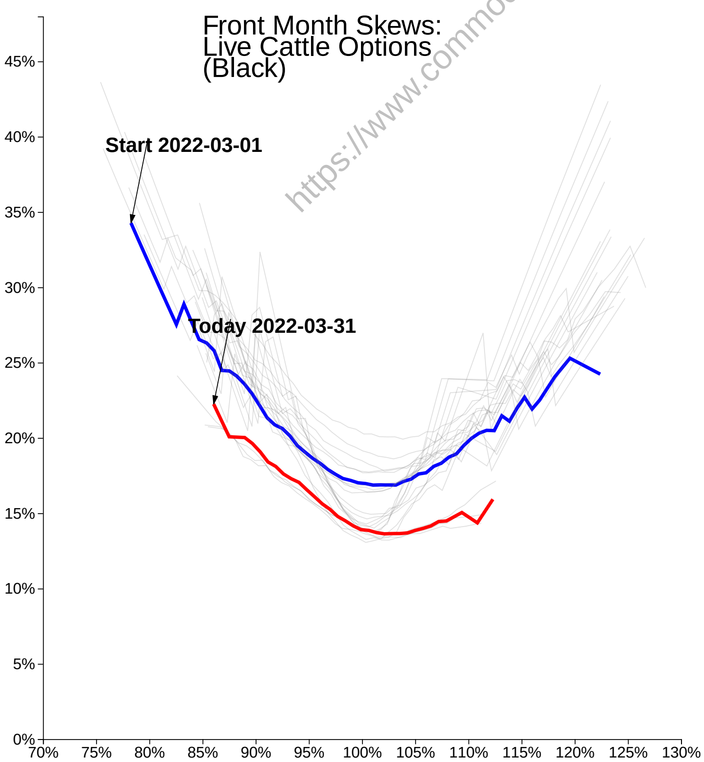

Today 2022-03-31
Start 2022-03-01
20220429
20220930
2023012
Price ($)

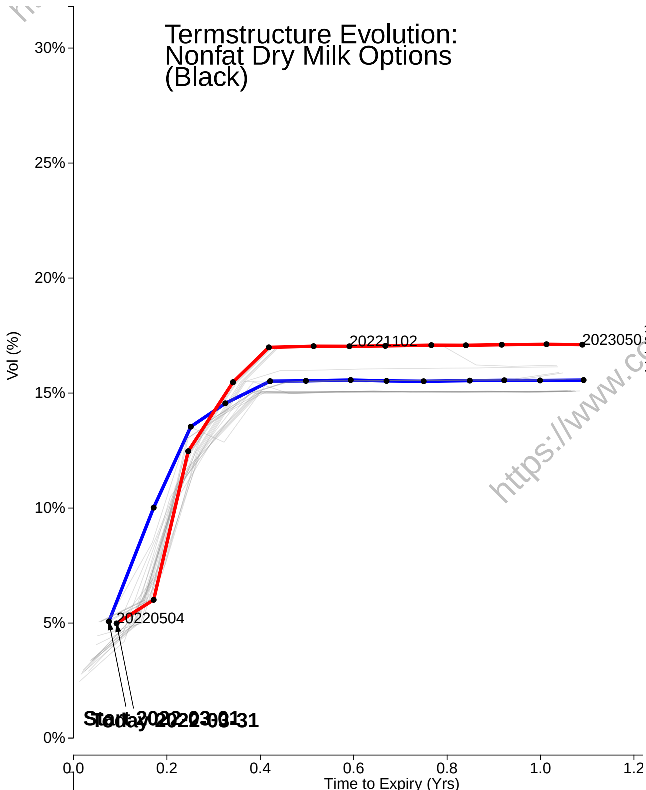

Front Month Skews:
Feeder Cattle Options
(Black)
Today 2022-03-31
Start 2022-03-01

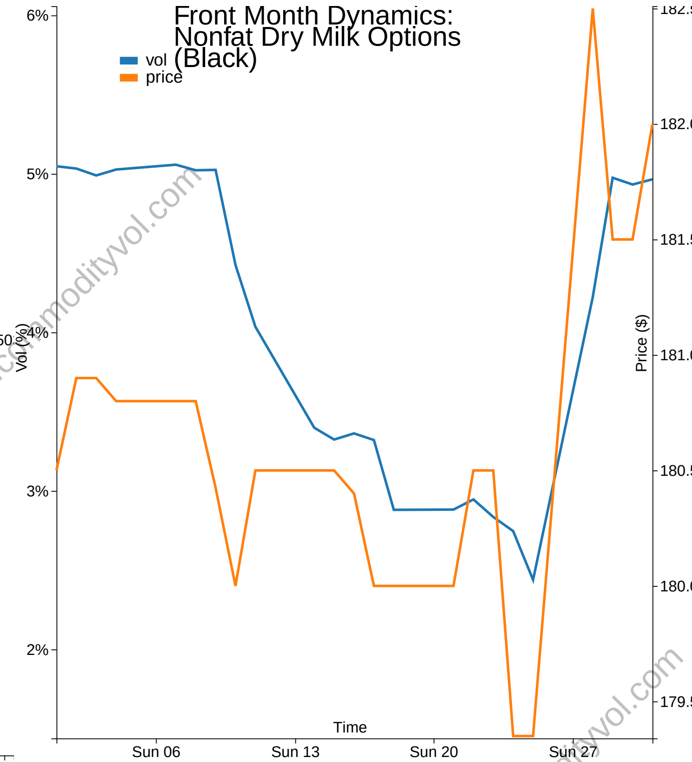

Termstructure Evolution:
Live Cattle Options
(Black)
Vol (%)
Time to Expiry (Yrs)
20220506
20221007
20230406
Start 2022-03-01
Today 2022-03-31

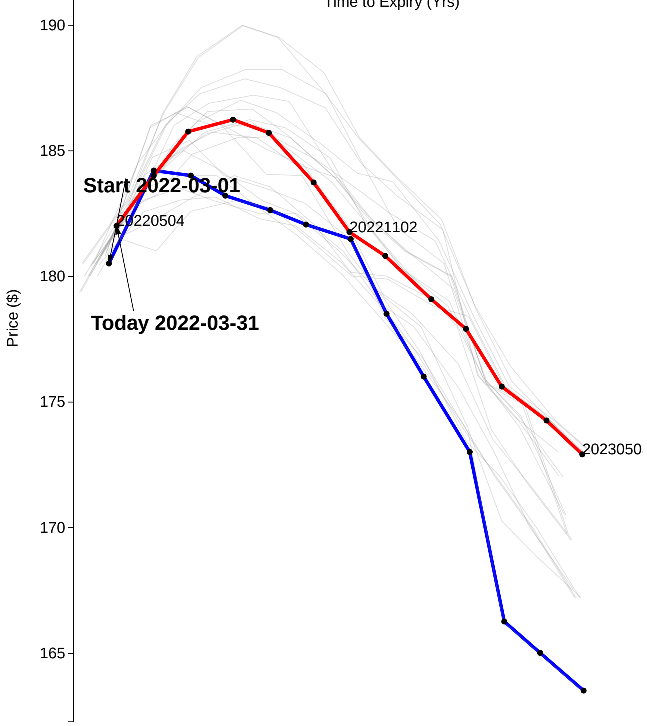

Front Month Dynamics:
Live Cattle Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

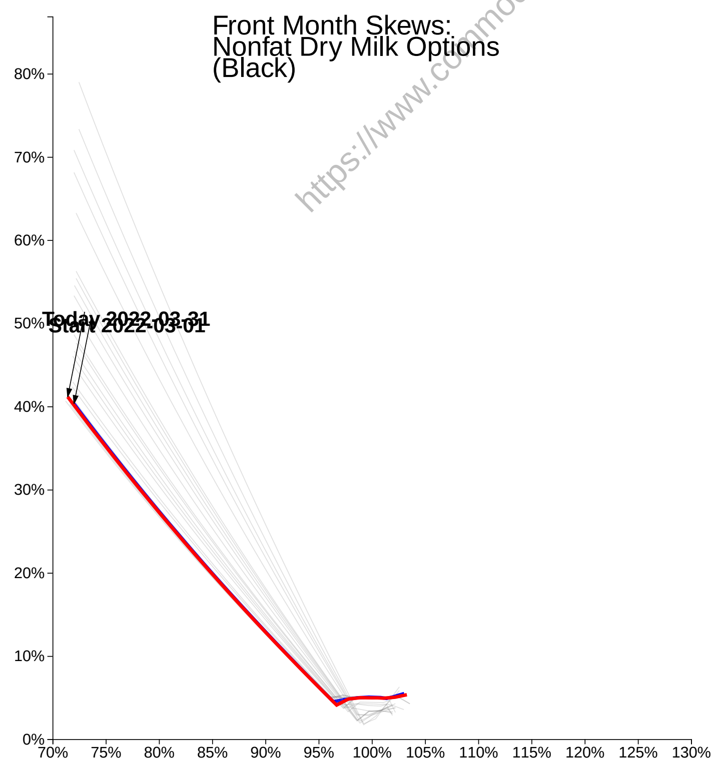

Price ($)
20230406
20221007
20220506
Start 2022-03-01
Today 2022-03-31

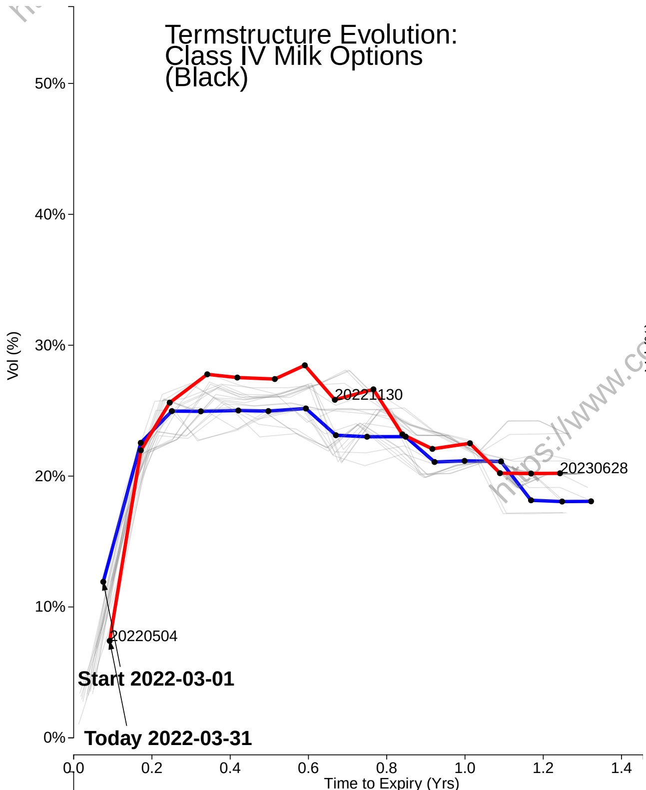

Front Month Skews:
Live Cattle Options
(Black)
Start 2022-03-01
Today 2022-03-31


Termstructure Evolution:
Nonfat Dry Milk Options
(Black)
Vol (%)
Time to Expiry (Yrs)
20220504
20221102
2023050
Start 2022-03-01
Today 2022-03-31

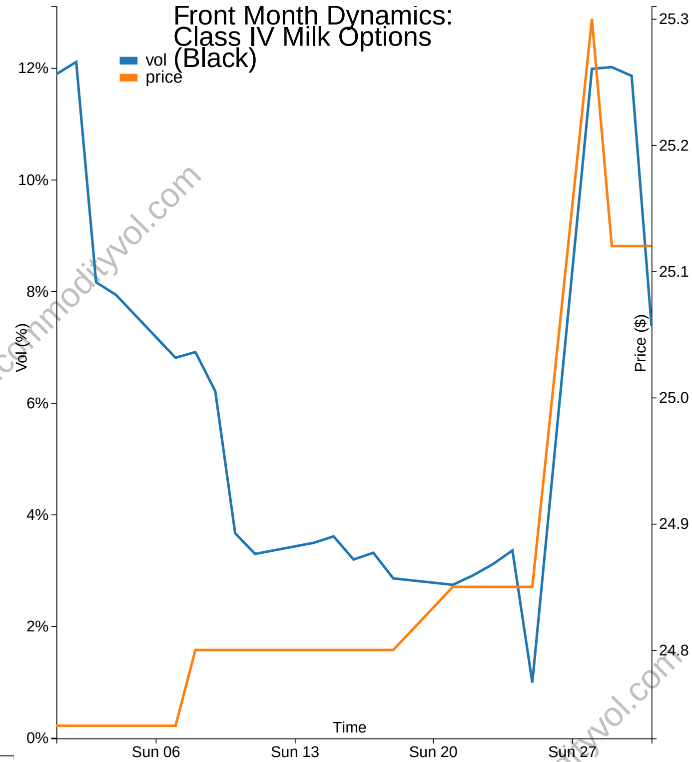

Front Month Dynamics:
Nonfat Dry Milk Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27


Price ($)
Start 2022-03-01
20220504
20221102
Today 2022-03-31
2023050

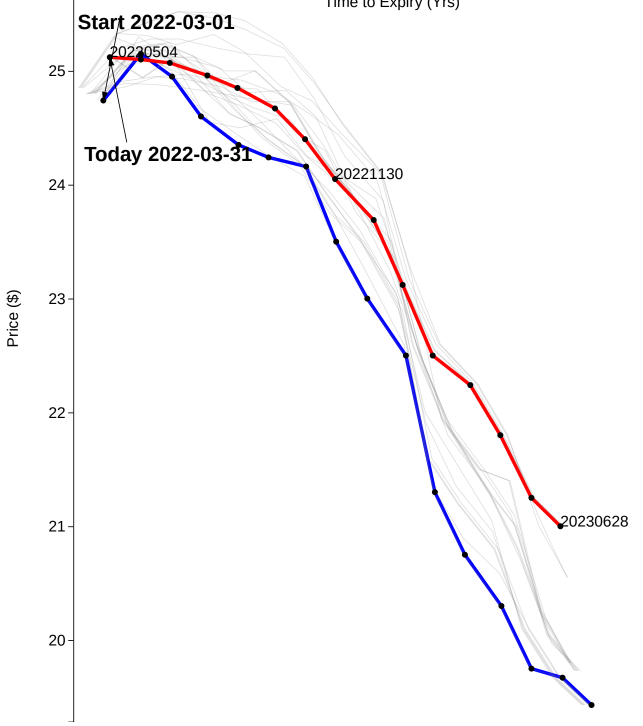

Front Month Skews:
Nonfat Dry Milk Options
(Black)
Today 2022-03-31
Start 2022-03-01



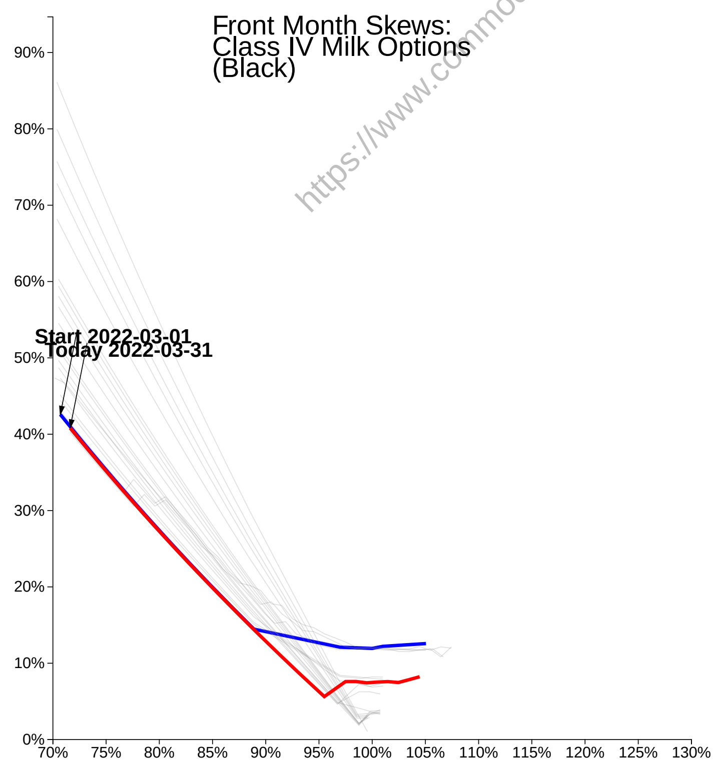
Termstructure Evolution:
Class IV Milk Options
(Black)
Vol (%)
Time to Expiry (Yrs)
20221130
20230628
20220504
Start 2022-03-01
Today 2022-03-31



Front Month Dynamics:
Class IV Milk Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

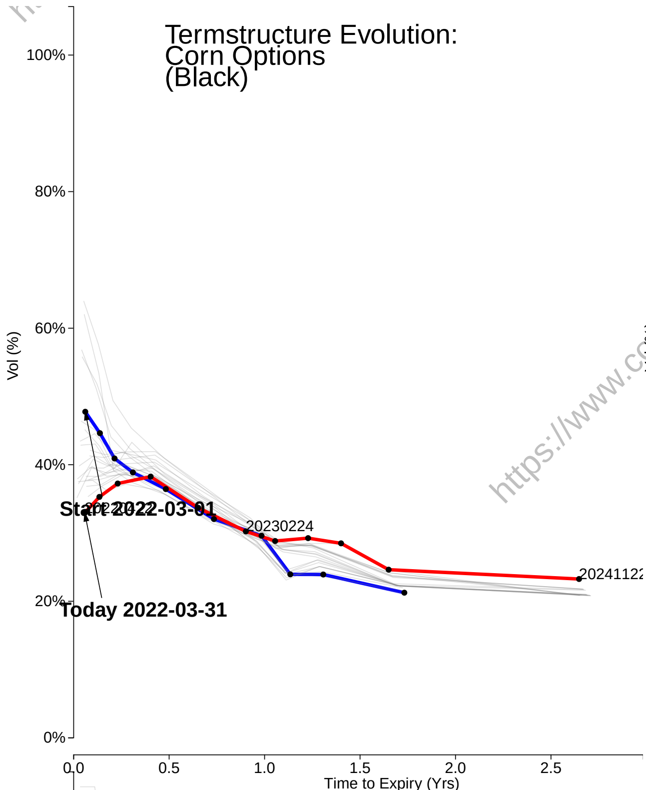


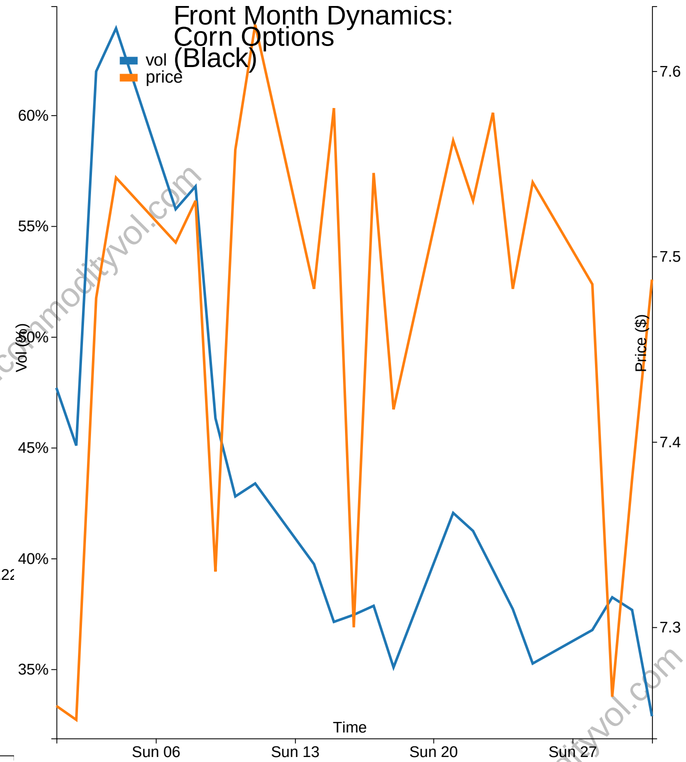
Start 2022-03-01
20220504
Today 2022-03-31
20221130
20230628
Price ($)

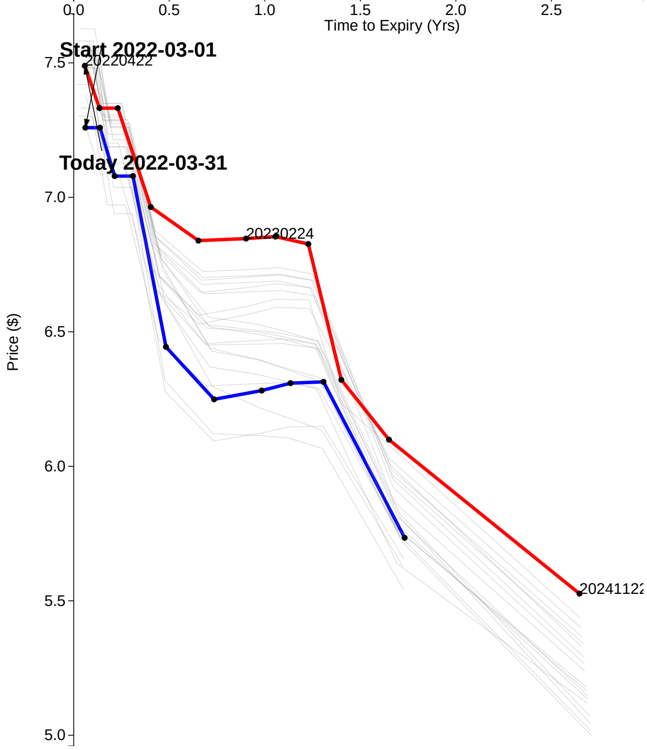


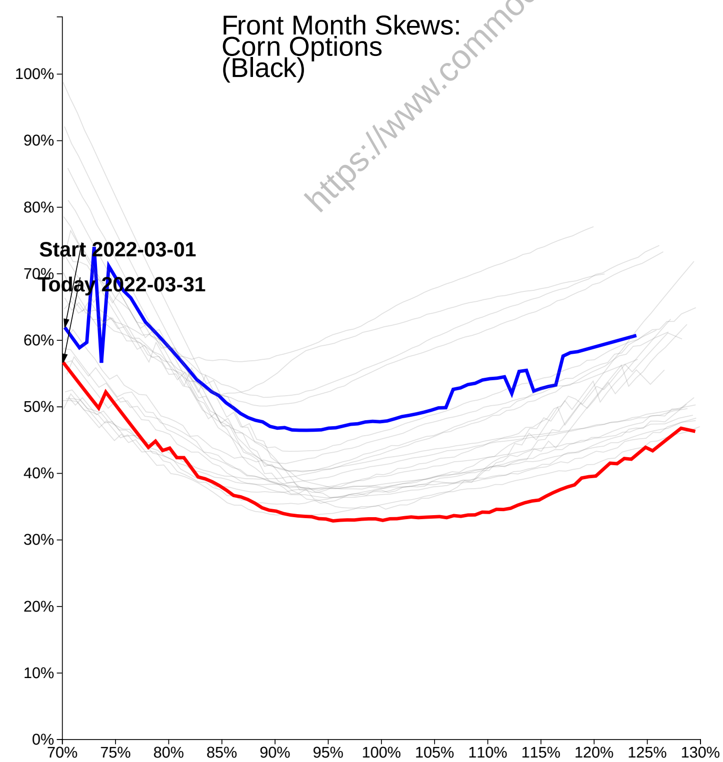
Front Month Skews:
Class IV Milk Options
(Black)
Start 2022-03-01
Today 2022-03-31

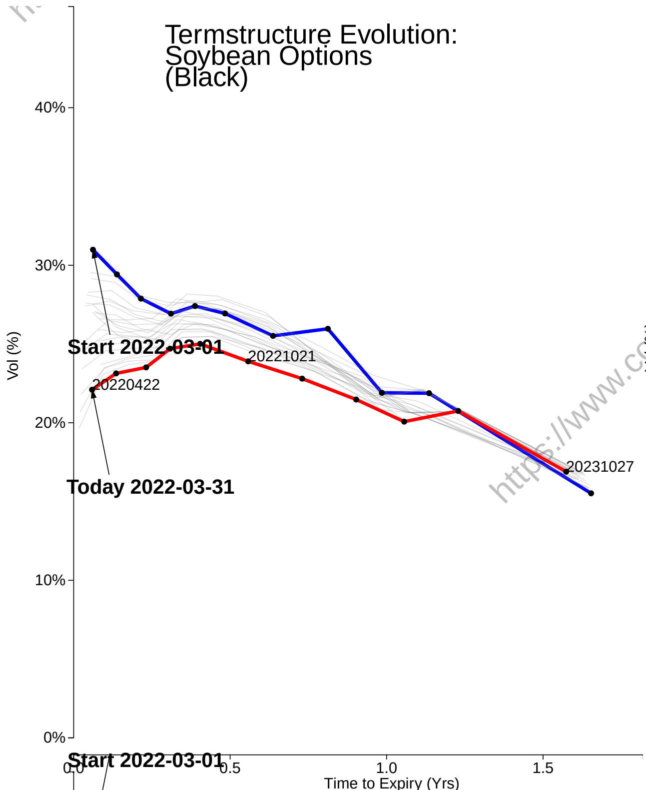
Ags, Grains, Softs and so forth

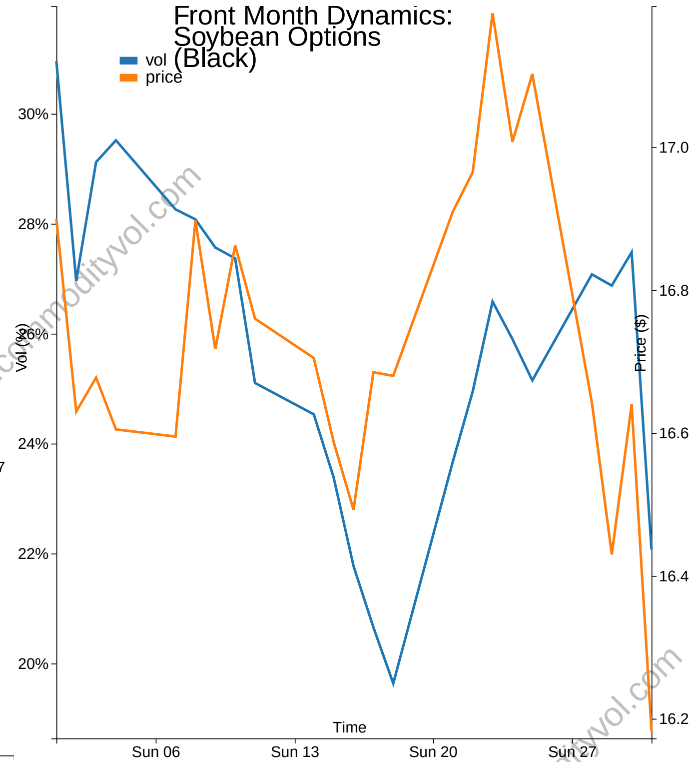

Termstructure Evolution:
Corn Options
(Black)
Vol (%)
Time to Expiry (Yrs)
Start 2022-03-01
Today 2022-03-31
20230224
20241122

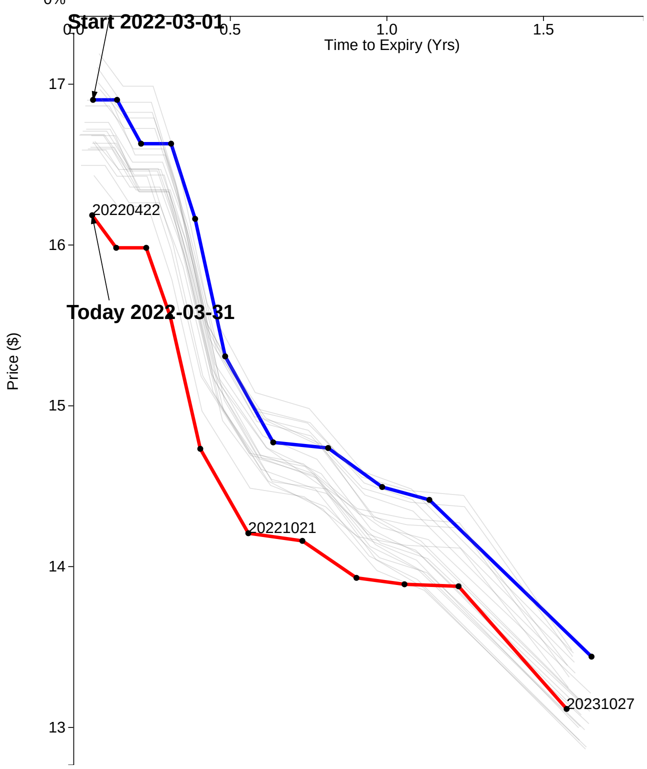

Front Month Dynamics:
Corn Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

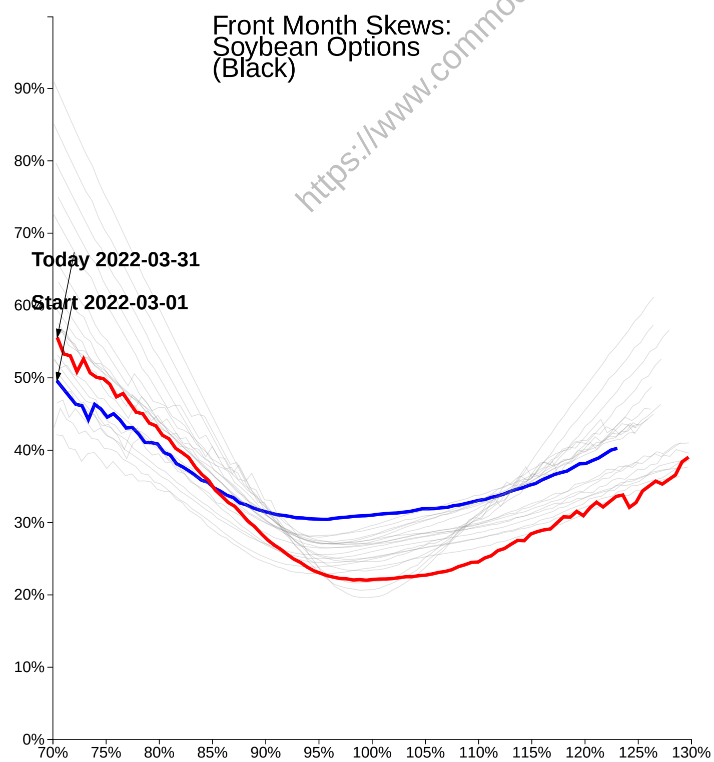

Price ($)
Start 2022-03-01
Today 2022-03-31
20220422
20230224
20241122

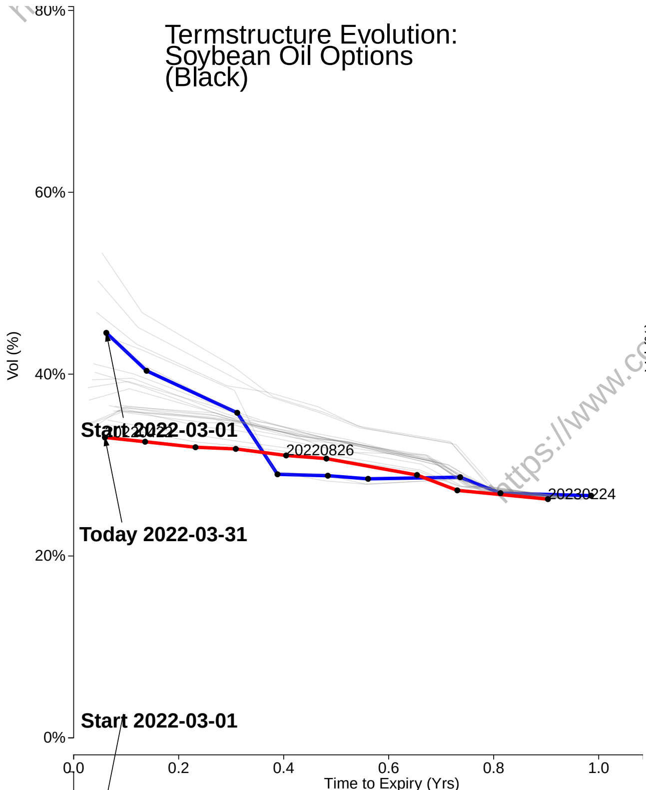

Front Month Skews:
Corn Options
(Black)
Start 2022-03-01
Today 2022-03-31

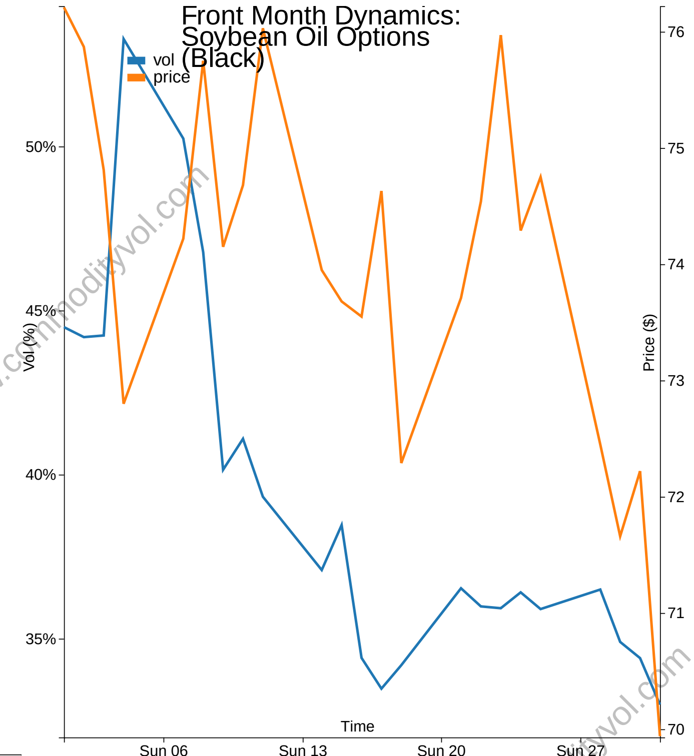

Termstructure Evolution:
Soybean Options
(Black)
Vol (%)
Start 2022-03-01
Today 2022-03-31
20220422
20221021
20231027
Time to Expiry (Yrs)
https://www.commodityvol.com

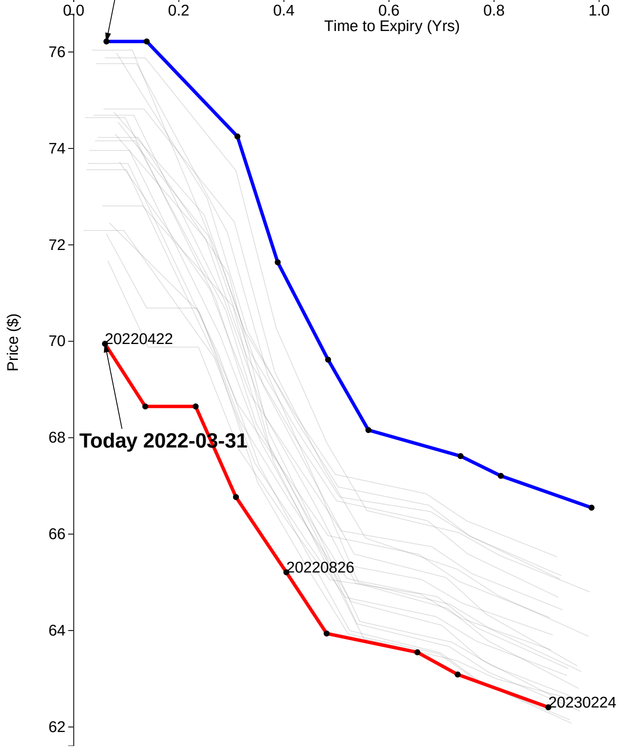

Front Month Dynamics:
Soybean Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27
https://www.commodityvol.com

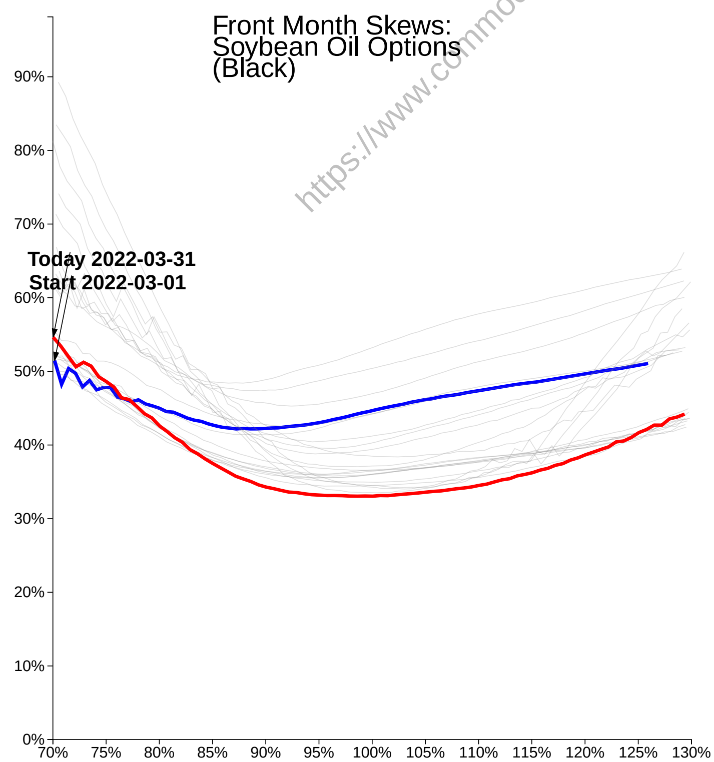

Price ($)
Start 2022-03-01
Today 2022-03-31
20220422
20221021
20231027

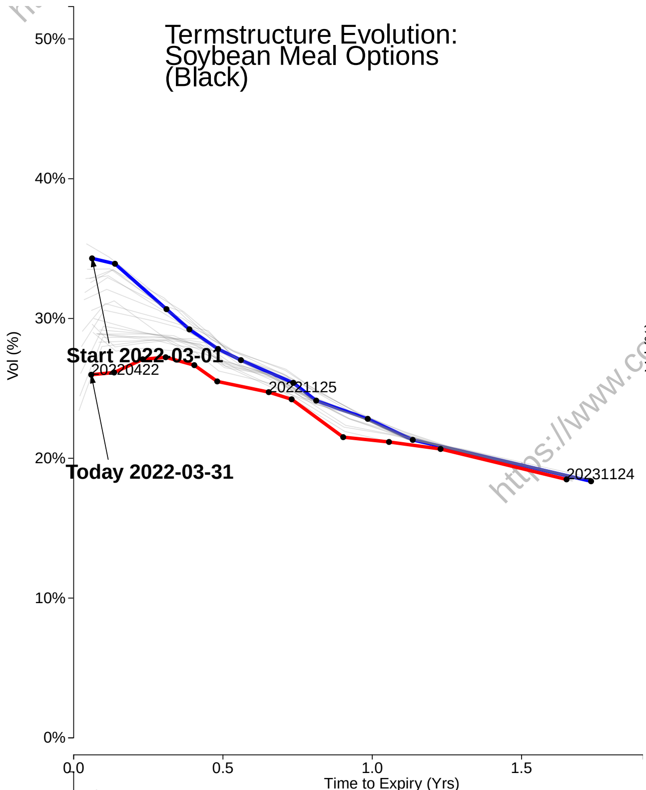

Front Month Skews:
Soybean Options
(Black)
Today 2022-03-31
Start 2022-03-01
https://www.commodityvol.com

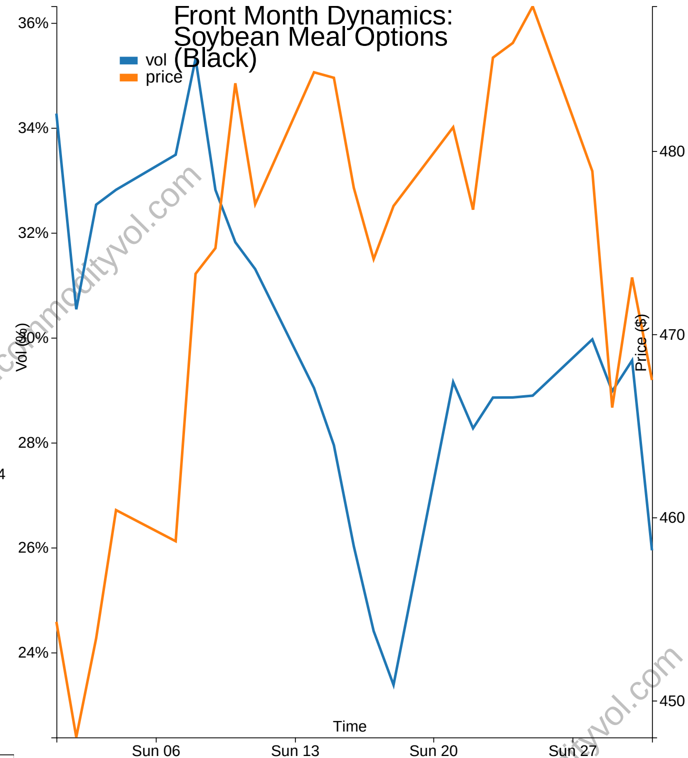

Termstructure Evolution:
Soybean Oil Options
(Black)
Vol (%)
80%
60%
40%
20%
0%
Start 2022-03-01
Today 2022-03-31
20220826
20230224
0.0
0.2
0.4
0.6
0.8
1.0
Time to Expiry (Yrs)

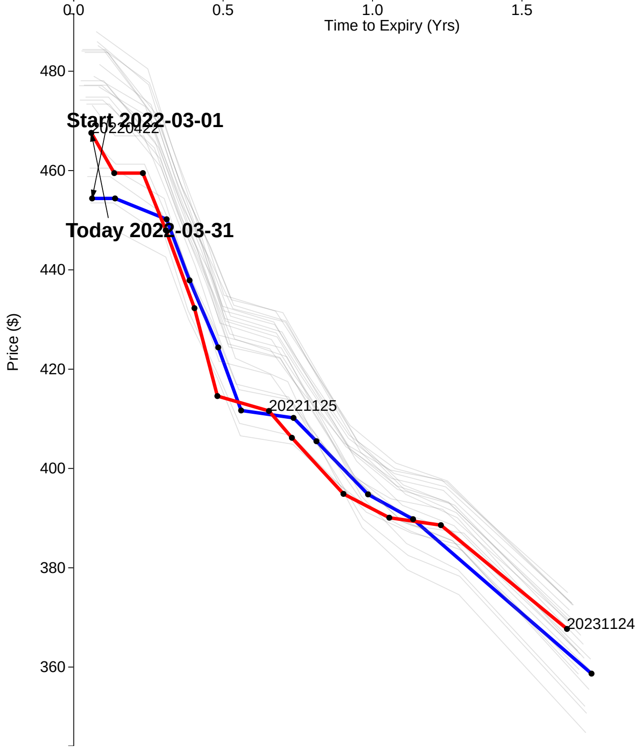

Front Month Dynamics:
Soybean Oil Options
(Black)
vol
price
Vol (%)
Price ($)
50%
45%
40%
35%
76
75
74
73
72
71
70
Time
Sun 06
Sun 13
Sun 20
Sun 27

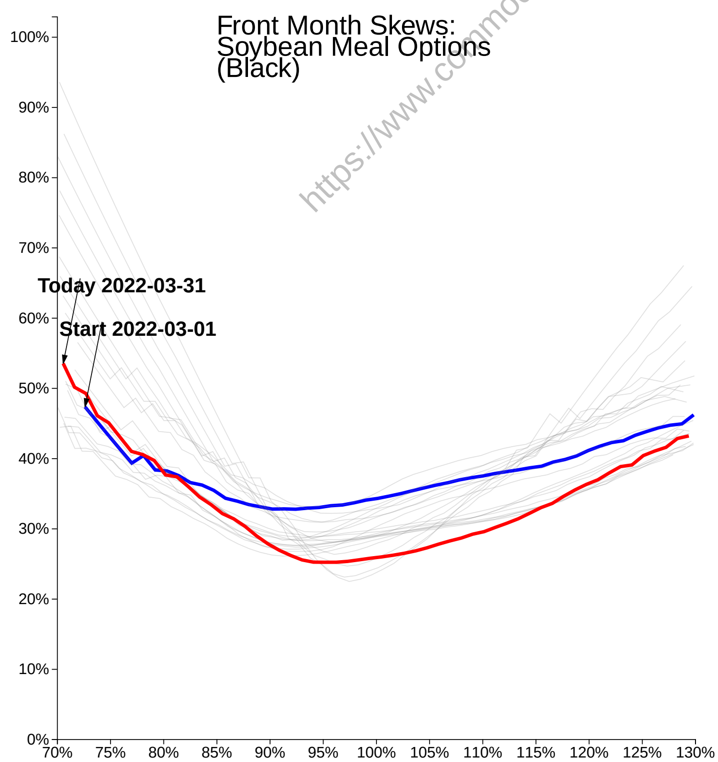

Start 2022-03-01
Price ($)
76
74
72
70
68
66
64
62
20220422
Today 2022-03-31
20220826
20230224

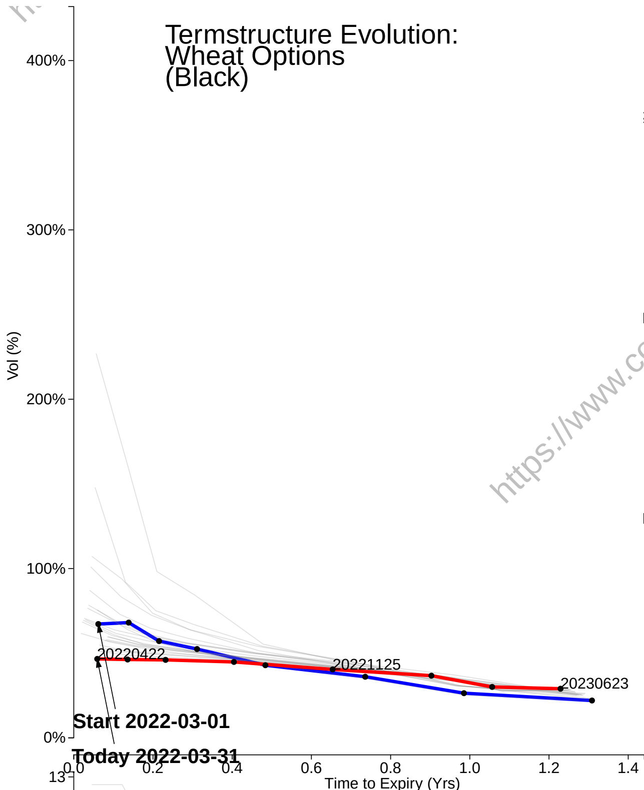

Front Month Skews:
Soybean Oil Options
(Black)
Today 2022-03-31
Start 2022-03-01
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
70%
75%
80%
85%
90%
95%
100%
105%
110%
115%
120%
125%
130%

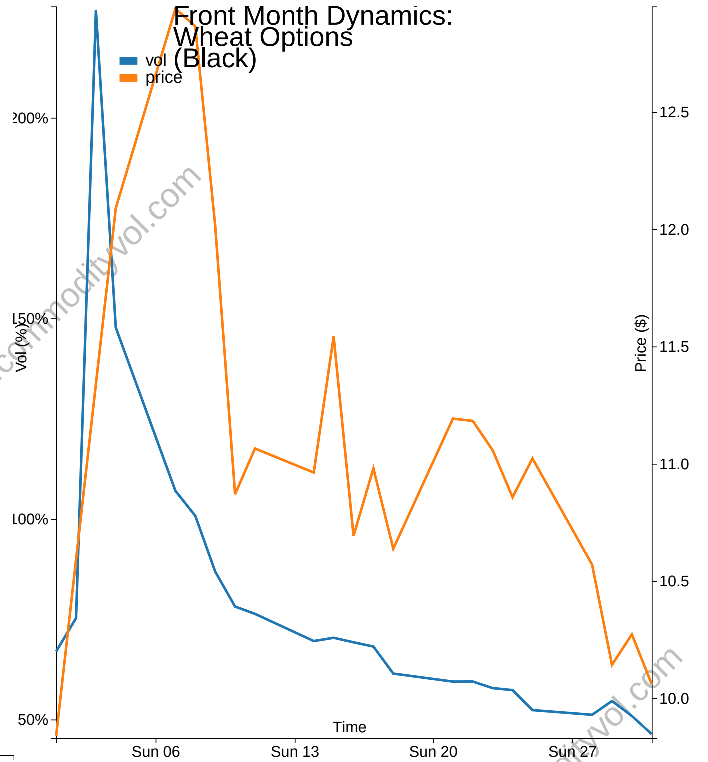

Termstructure Evolution:
Soybean Meal Options
(Black)
Vol (%)
50%
40%
30%
20%
10%
0%
Start 2022-03-01
20220422
20221125
Today 2022-03-31
20231124
0.0
0.5
1.0
1.5
Time to Expiry (Yrs)

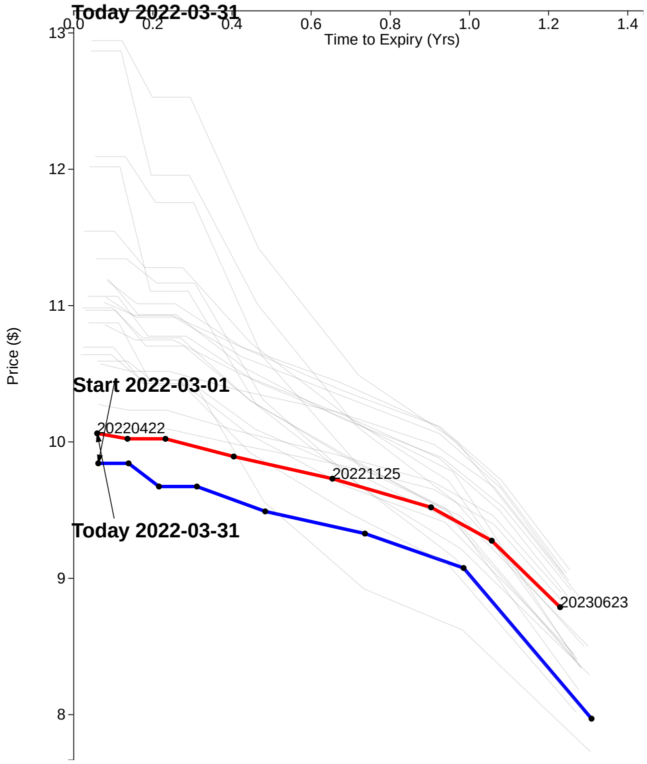

Front Month Dynamics:
Soybean Meal Options
(Black)
vol
price
Vol (%)
36%
34%
32%
30%
28%
26%
24%
Price ($)
480
470
460
450
Time
Sun 06
Sun 13
Sun 20
Sun 27

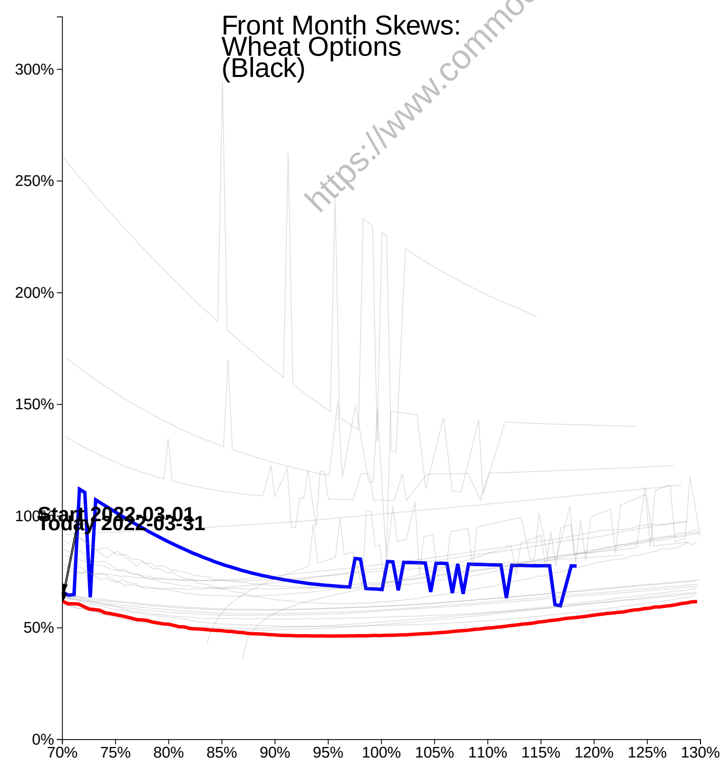

Price ($)
480
460
440
420
400
380
360
Start 2022-03-01
20220422
Today 2022-03-31
20221125
20231124

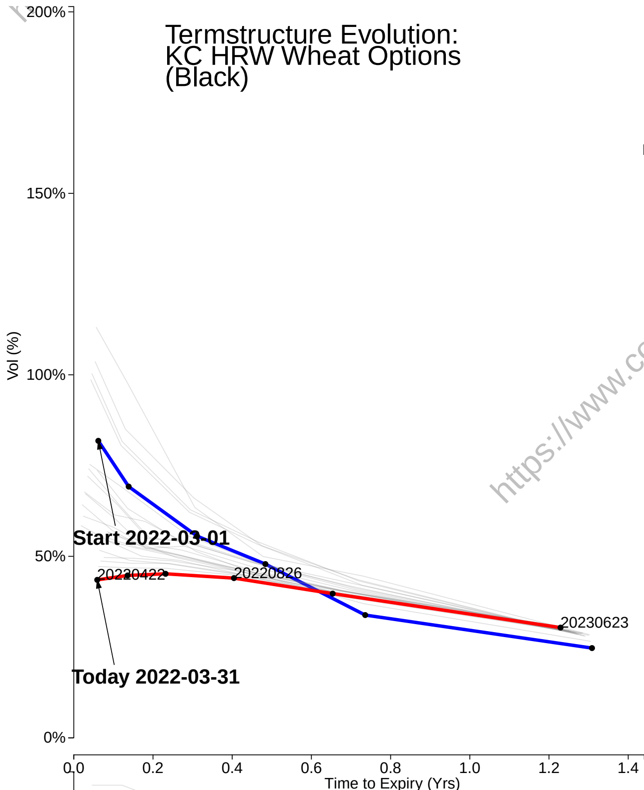

Front Month Skews:
Soybean Meal Options
(Black)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Today 2022-03-31
Start 2022-03-01
70%
75%
80%
85%
90%
95%
100%
105%
110%
115%
120%
125%
130%

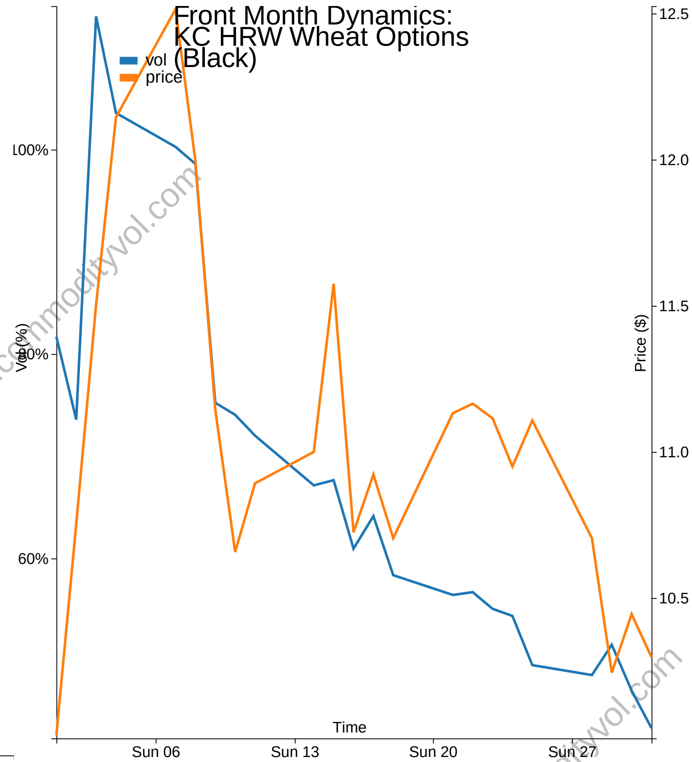

Termstructure Evolution:
Wheat Options
(Black)
Vol (%)
400%
300%
200%
100%
0%
20220422
20221125
20230623
Start 2022-03-01
Today 2022-03-31
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
Time to Expiry (Yrs)

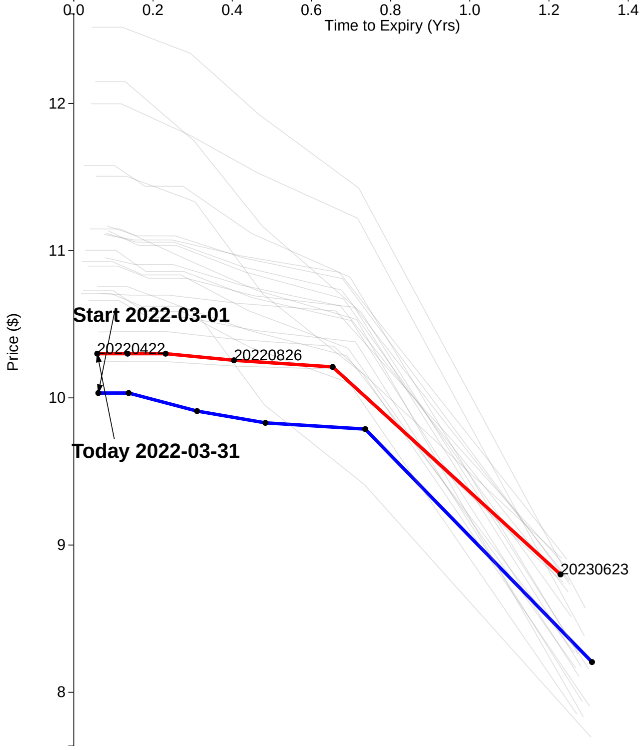

Front Month Dynamics:
Wheat Options
(Black)
vol
price
Vol (%)
Price ($)
200%
150%
100%
50%
12.5
12.0
11.5
11.0
10.5
10.0
Time
Sun 06
Sun 13
Sun 20
Sun 27

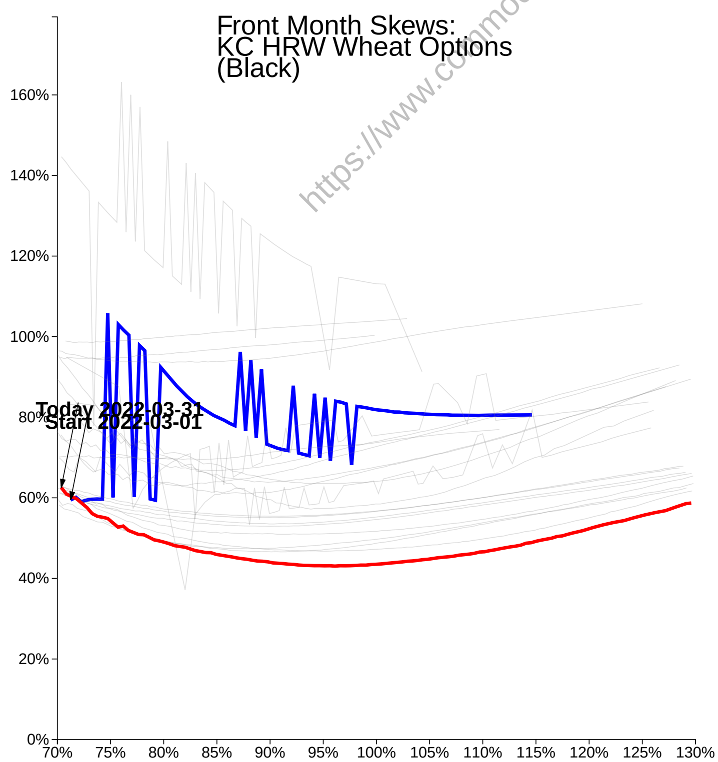

Price ($)
13
12
11
10
9
8
Start 2022-03-01
20220422
20221125
Today 2022-03-31
20230623

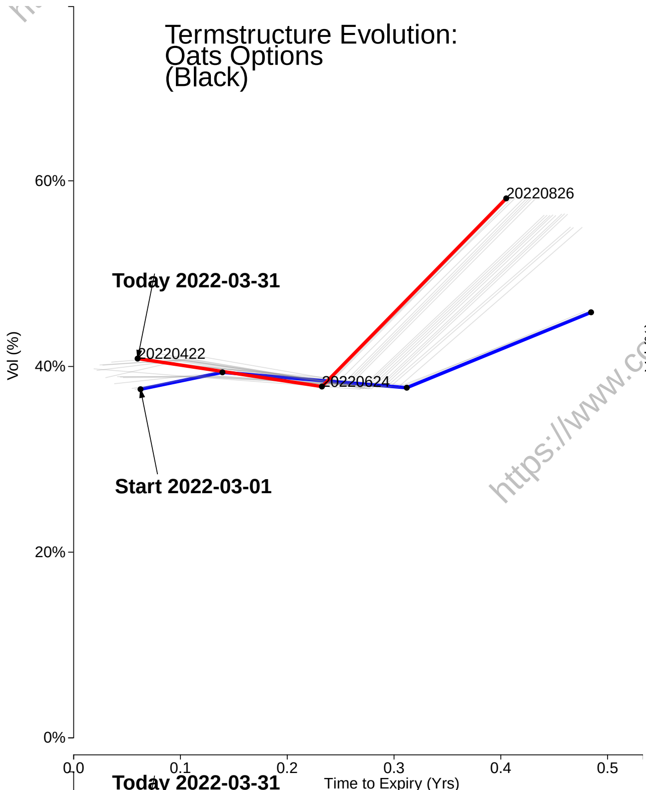

Front Month Skews:
Wheat Options
(Black)
300%
250%
200%
150%
100%
50%
0%
Start 2022-03-01
Today 2022-03-31
70%
75%
80%
85%
90%
95%
100%
105%
110%
115%
120%
125%
130%

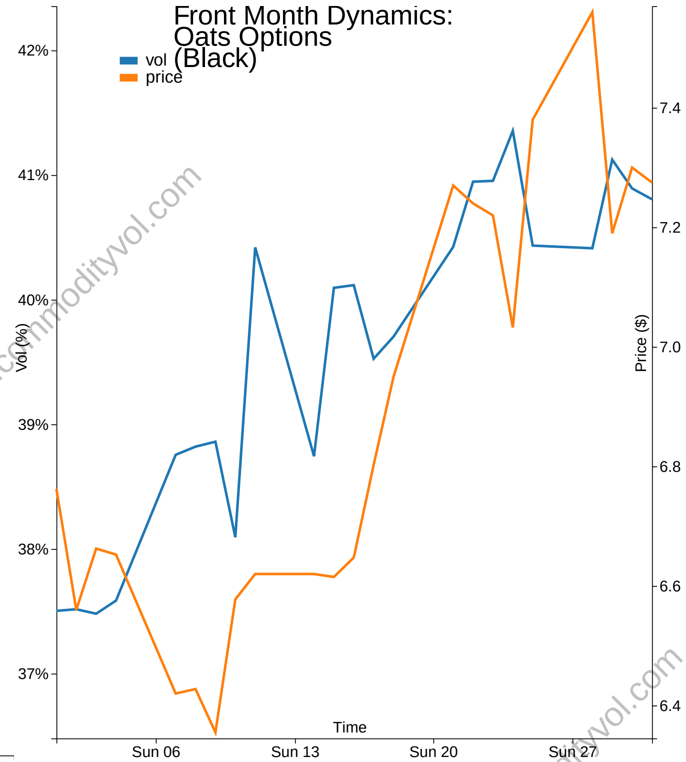

Termstructure Evolution:
KC HRW Wheat Options
(Black)
Vol (%)
200%
150%
100%
50%
0%
Start 2022-03-01
Today 2022-03-31
20220422
20220826
20230623
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
Time to Expiry (Yrs)

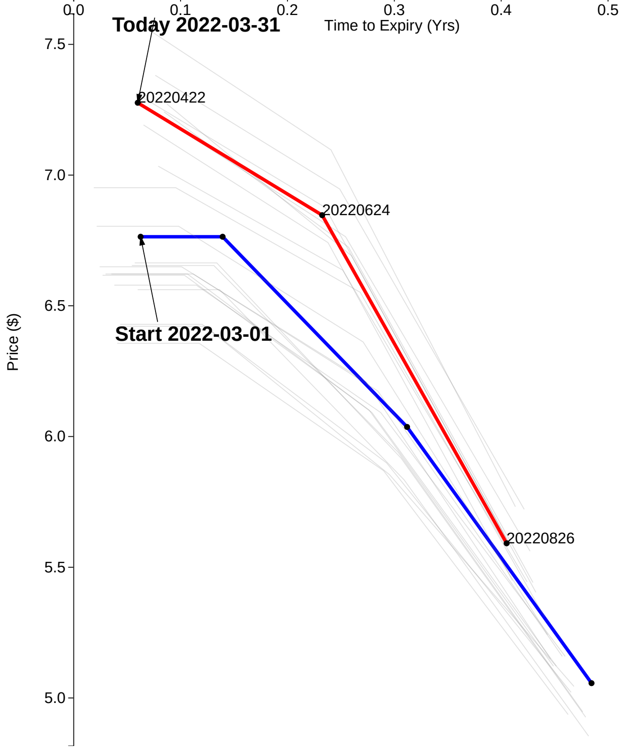

Front Month Dynamics:
KC HRW Wheat Options
(Black)
vol
price
Vol (%)
Price ($)
100%
80%
60%
12.5
12.0
11.5
11.0
10.5
Time
Sun 06
Sun 13
Sun 20
Sun 27
https://www.commodityvol.com

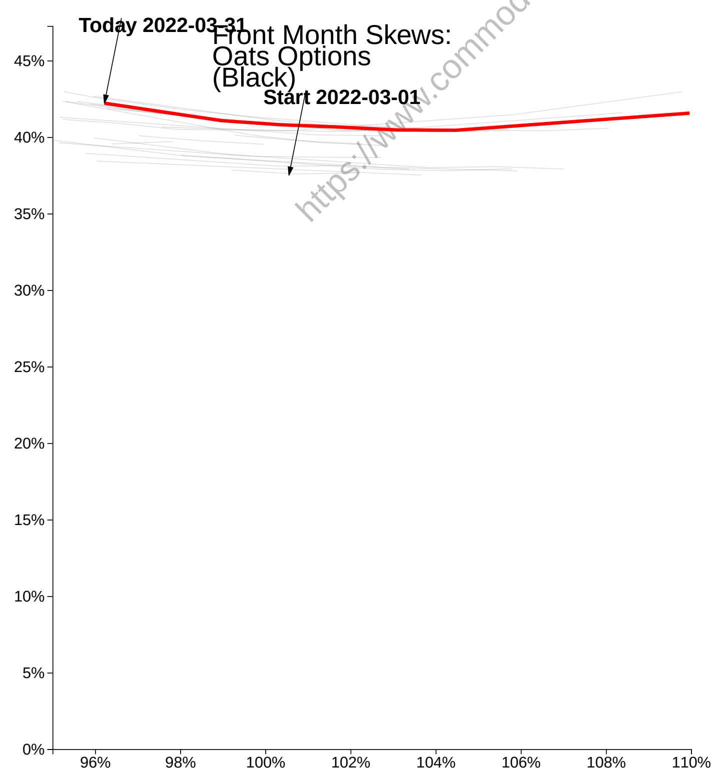

Price ($)
12
11
10
9
8
Start 2022-03-01
Today 2022-03-31
20220422
20220826
20230623

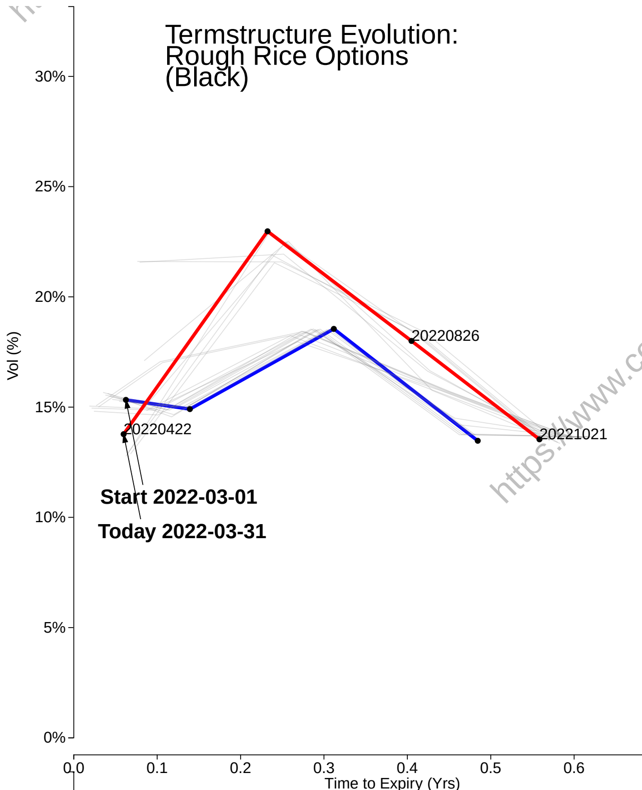

Front Month Skews:
KC HRW Wheat Options
(Black)
160%
140%
120%
100%
80%
60%
40%
20%
0%
Today 2022-03-31
Start 2022-03-01
70%
75%
80%
85%
90%
95%
100%
105%
110%
115%
120%
125%
130%
https://www.commodityvol.com

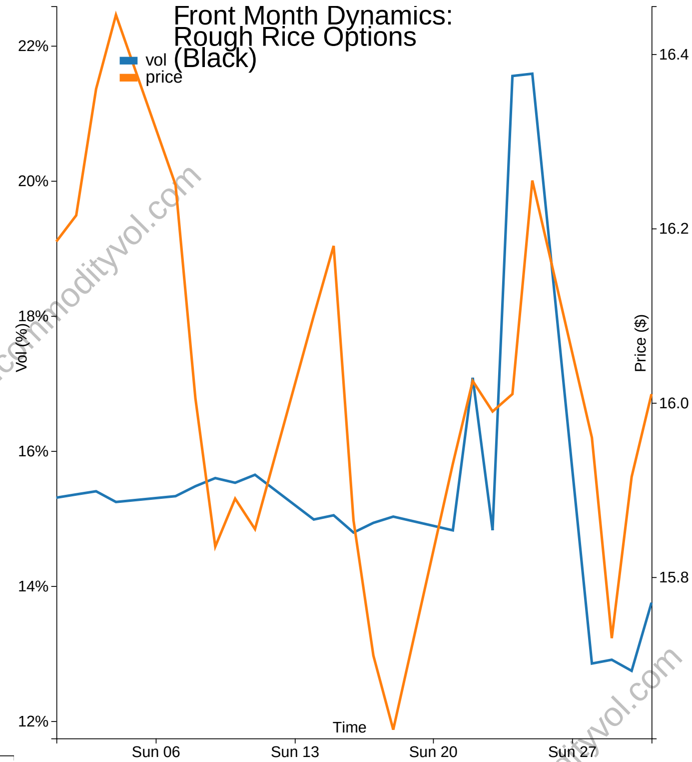

Termstructure Evolution:
Oats Options
(Black)
Today 2022-03-31
Start 2022-03-01
20220422
20220624
20220826
Vol (%)
Time to Expiry (Yrs)
0%
20%
40%
60%
0.0
0.1
0.2
0.3
0.4
0.5

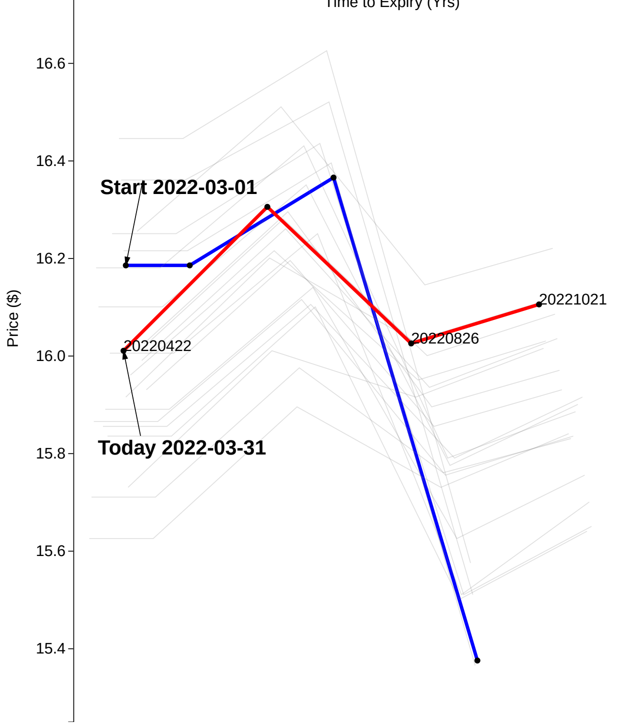

Front Month Dynamics:
Oats Options
(Black)
vol
price
Vol (%)
Price ($)
Time
37%
38%
39%
40%
41%
42%
6.4
6.6
6.8
7.0
7.2
7.4
Sun 06
Sun 13
Sun 20
Sun 27

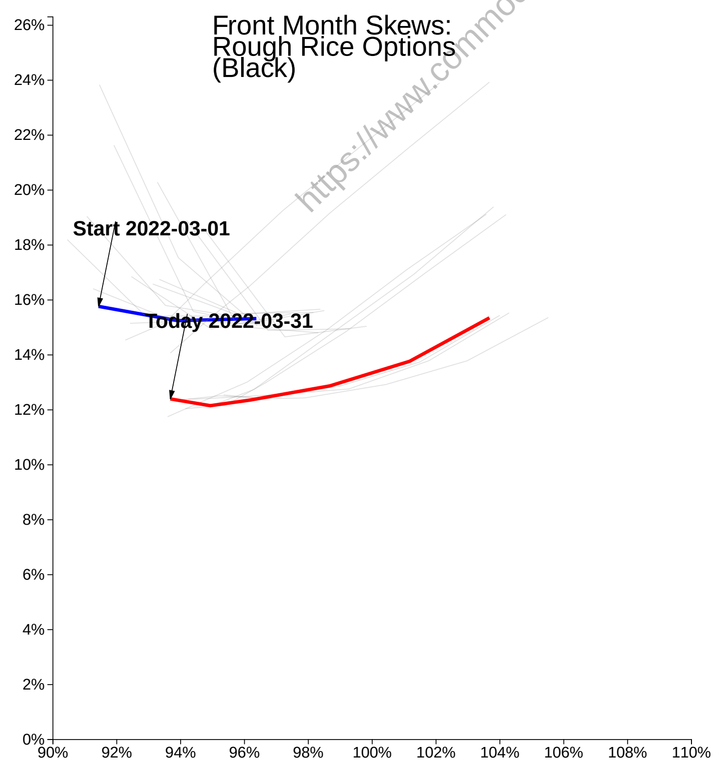

Today 2022-03-31
Start 2022-03-01
20220422
20220624
20220826
Price ($)
5.0
5.5
6.0
6.5
7.0
7.5

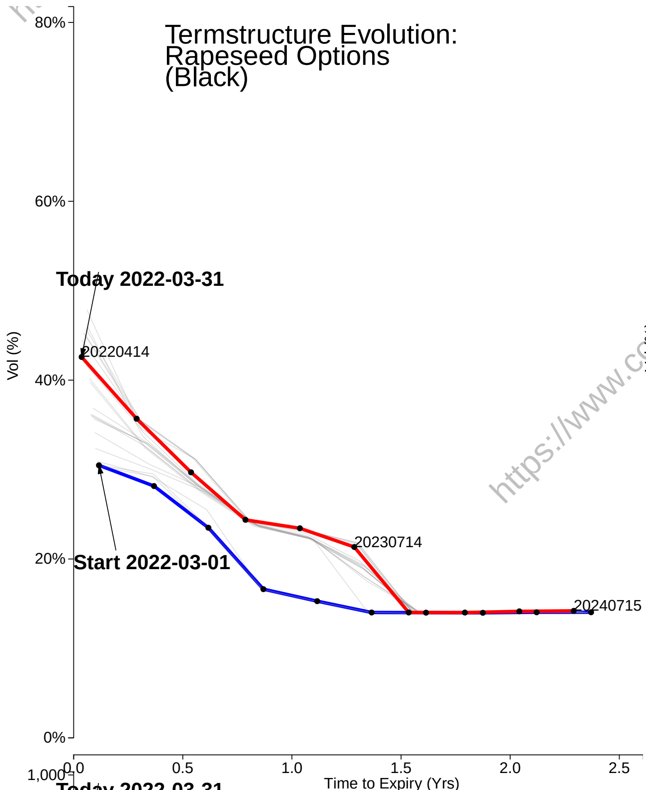

Front Month Skews:
Oats Options
(Black)
Today 2022-03-31
Start 2022-03-01
0%
5%
10%
15%
20%
25%
30%
35%
40%
45%
96%
98%
100%
102%
104%
106%
108%
110%

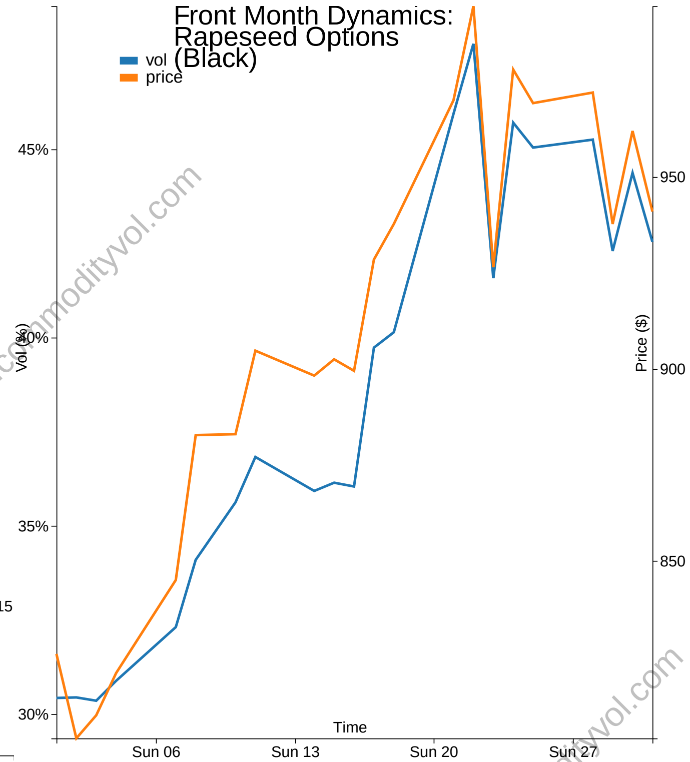

Termstructure Evolution:
Rough Rice Options
(Black)
Vol (%)
Time to Expiry (Yrs)
20220826
20220422
20221021
Start 2022-03-01
Today 2022-03-31

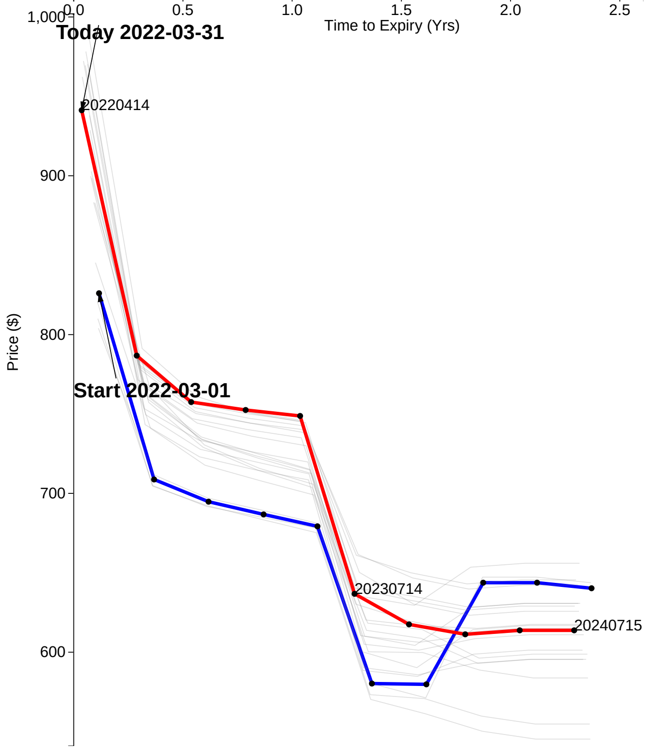

Front Month Dynamics:
Rough Rice Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

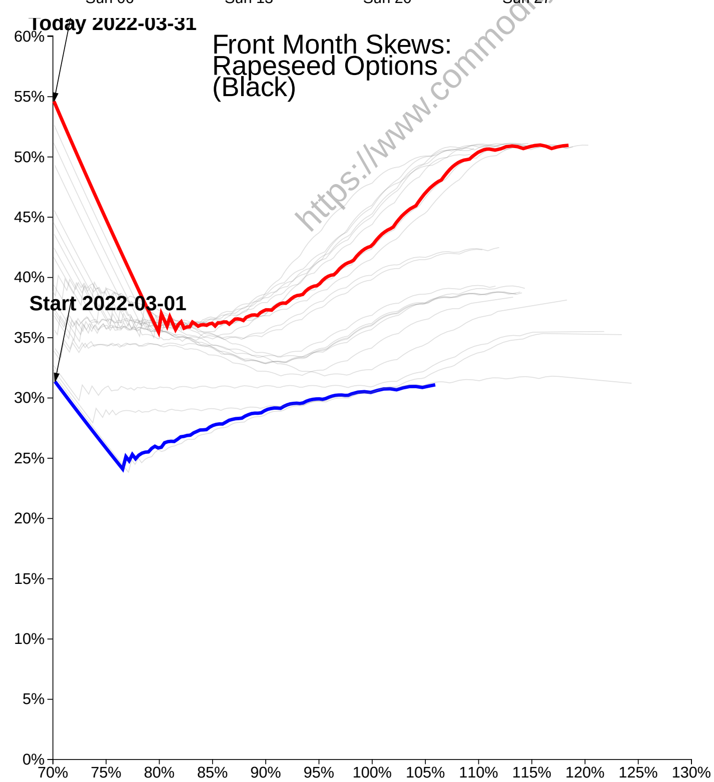

Price ($)
Start 2022-03-01
Today 2022-03-31
20220422
20220826
20221021


Front Month Skews:
Rough Rice Options
(Black)
Start 2022-03-01
Today 2022-03-31

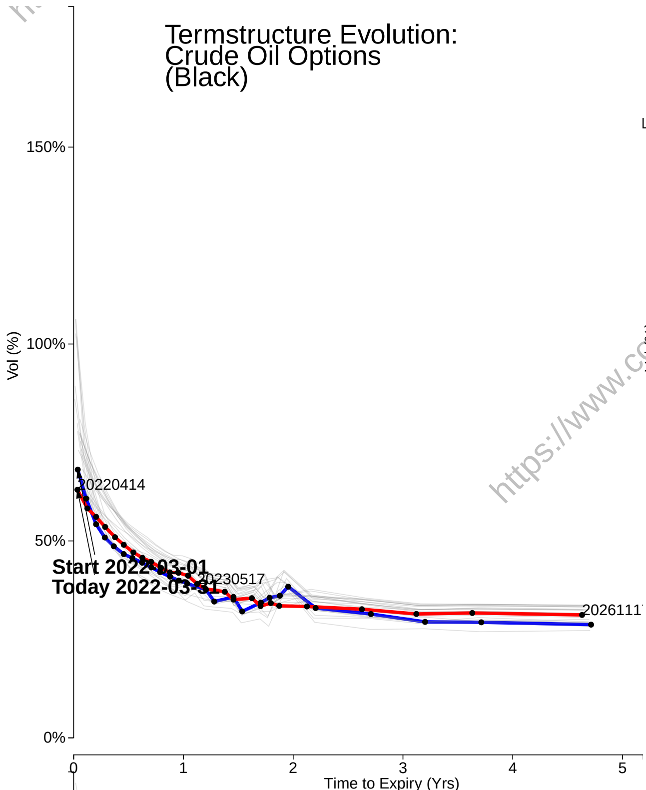

Termstructure Evolution:
Rapeseed Options
(Black)
Today 2022-03-31
Start 2022-03-01
20220414
20230714
20240715
Vol (%)
Time to Expiry (Yrs)

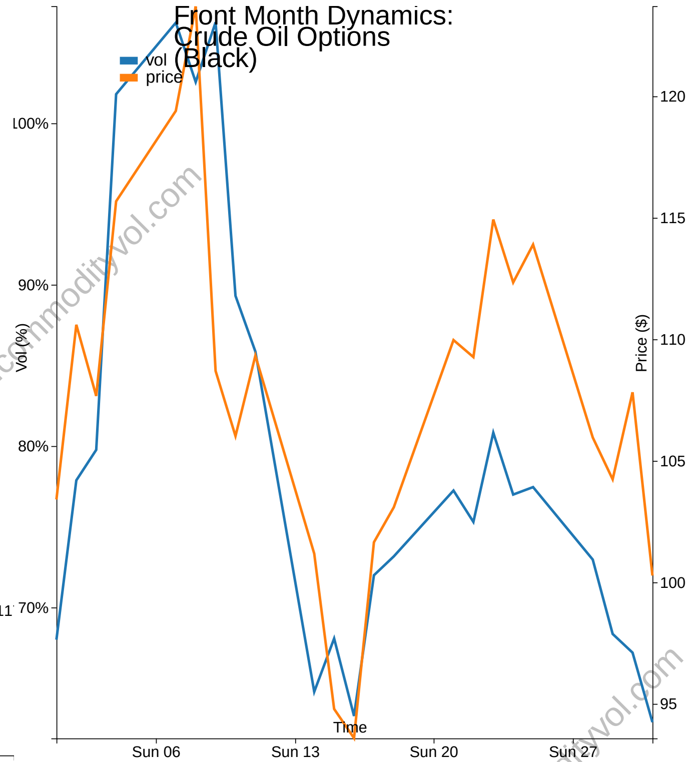

Front Month Dynamics:
Rapeseed Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

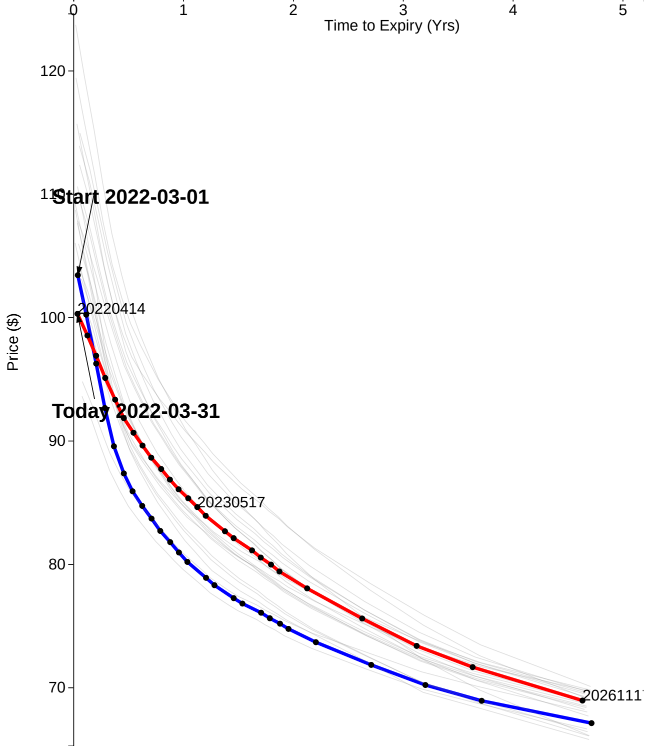

Today 2022-03-31
Start 2022-03-01
20220414
20230714
20240715
Price ($)

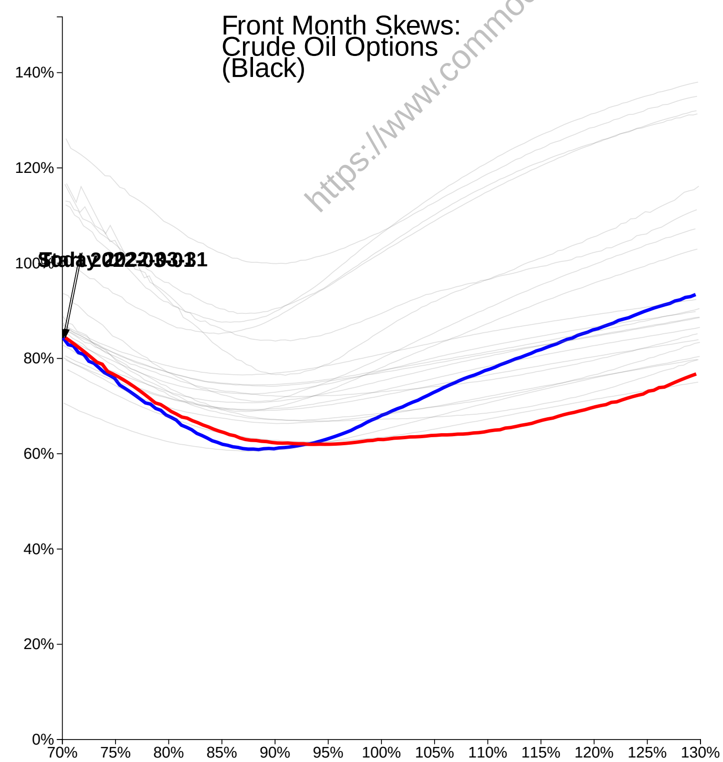

Front Month Skews:
Rapeseed Options
(Black)
Today 2022-03-31
Start 2022-03-01

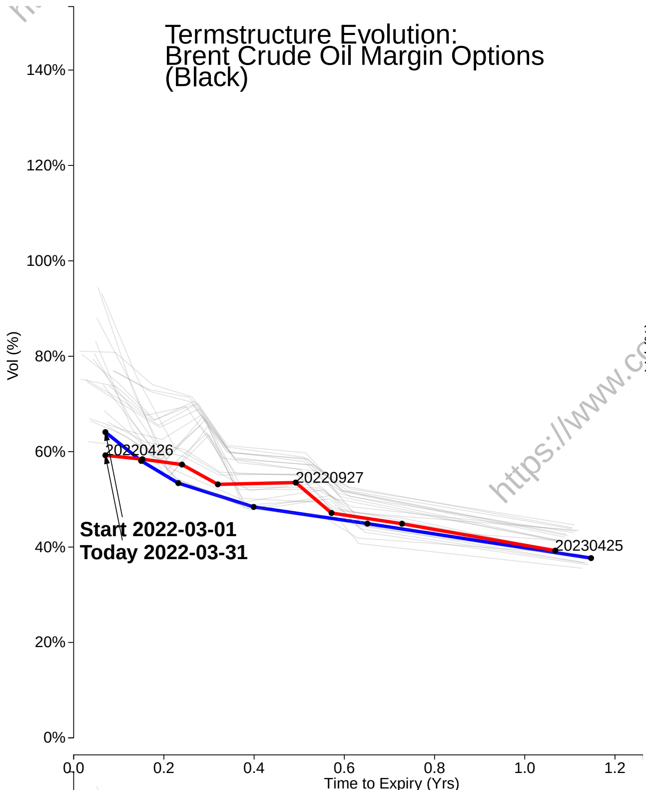
Crude and Derivatives

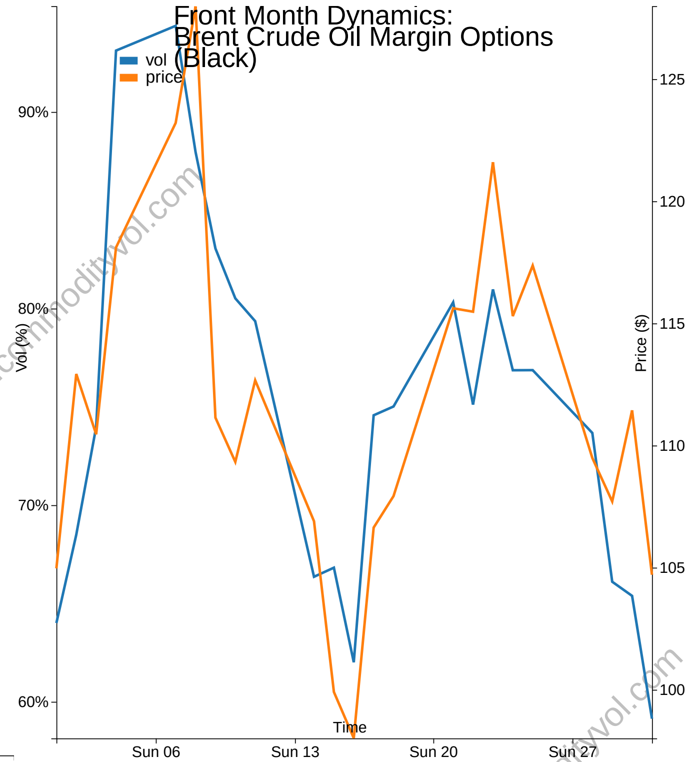

Termstructure Evolution:
Crude Oil Options
(Black)
Vol (%)
Start 2022-03-01
Today 2022-03-31
20220414
20230517
Time to Expiry (Yrs)

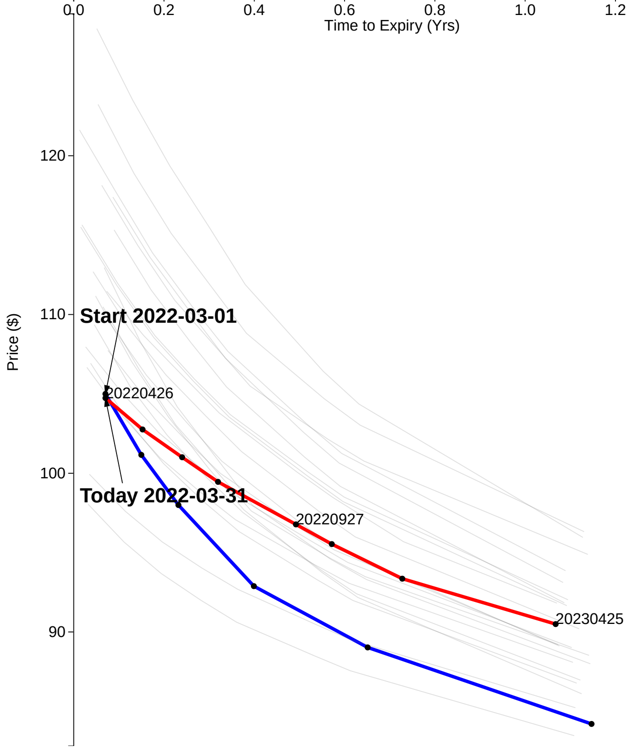

Front Month Dynamics:
Crude Oil Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

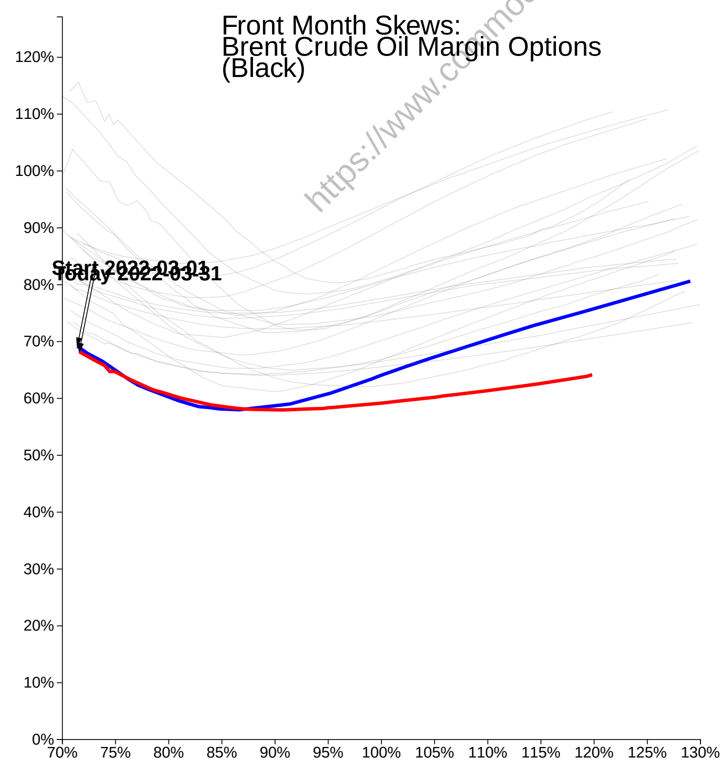

Price ($)
Start 2022-03-01
Today 2022-03-31
20220414
20230517

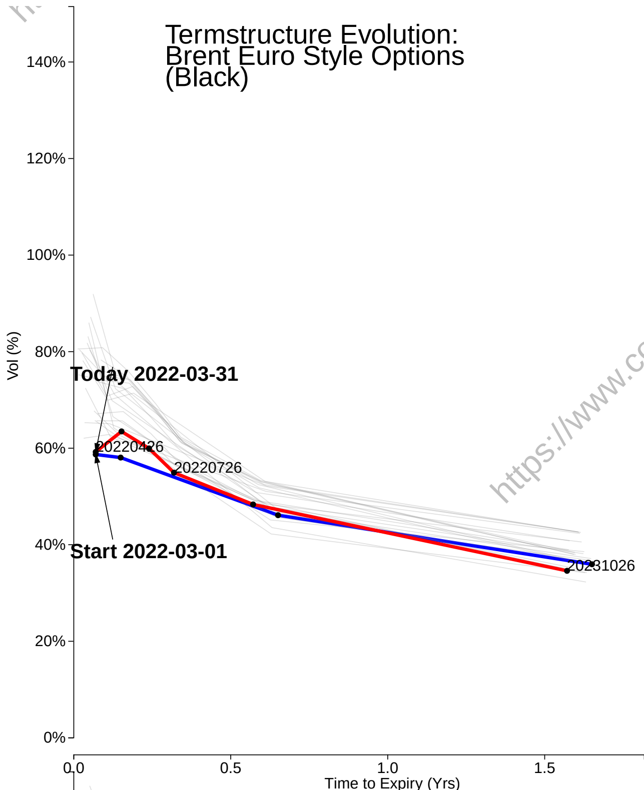

Front Month Skews:
Crude Oil Options
(Black)

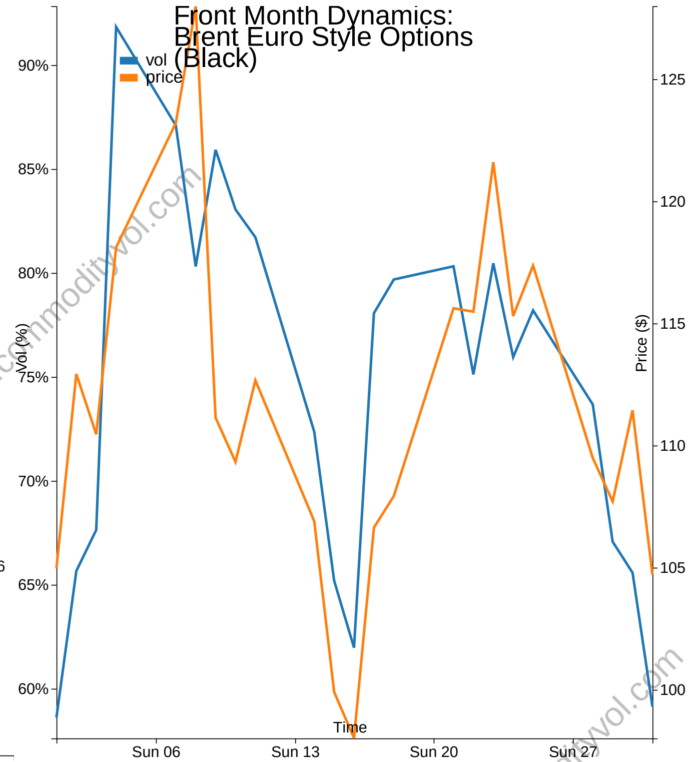

Termstructure Evolution:
Brent Crude Oil Margin Options
(Black)
Vol (%)
Time to Expiry (Yrs)
20220426
20220927
20230425
Start 2022-03-01
Today 2022-03-31

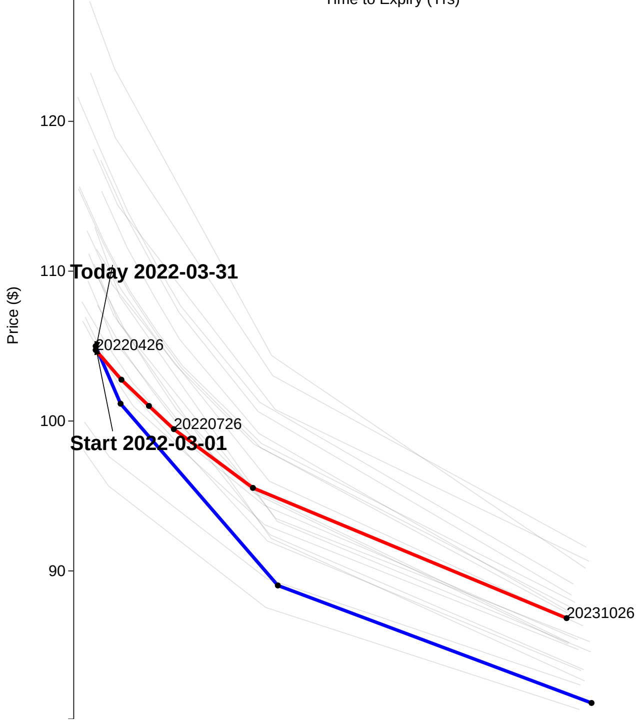

Front Month Dynamics:
Brent Crude Oil Margin Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

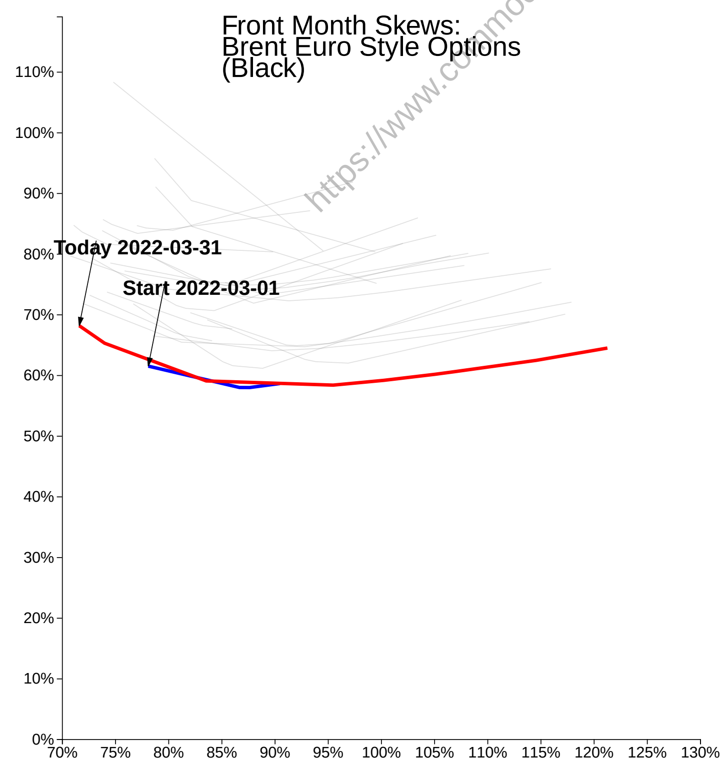

Price ($)
Start 2022-03-01
20220426
Today 2022-03-31
20220927
20230425

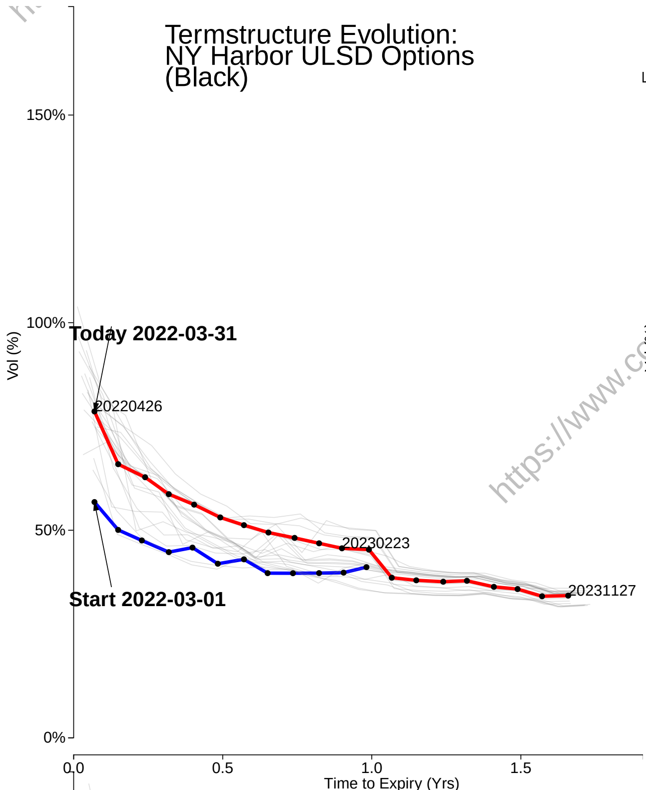

Front Month Skews:
Brent Crude Oil Margin Options
(Black)
Start 2022-03-01
Today 2022-03-31

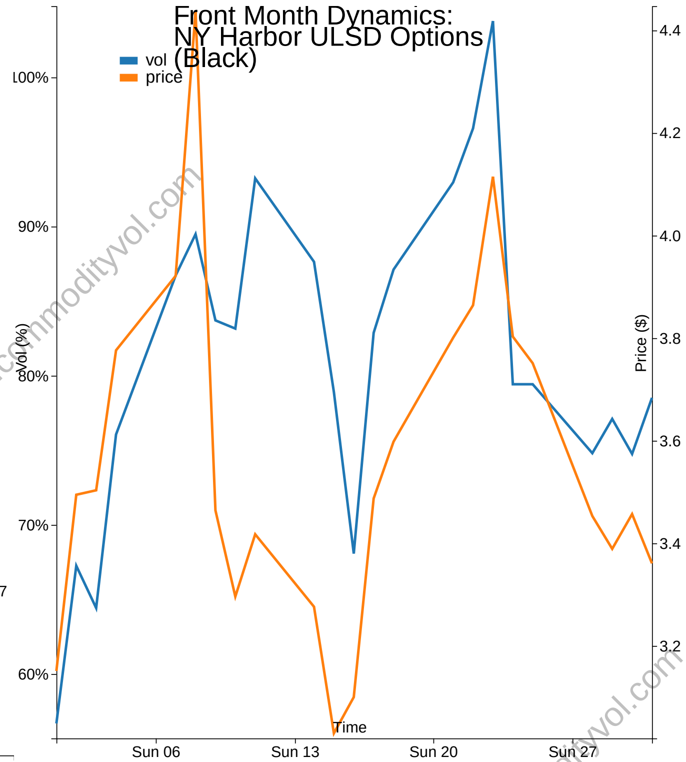

Termstructure Evolution:
Brent Euro Style Options
(Black)
Vol (%)
Today 2022-03-31
Start 2022-03-01
20220426
20220726
20231026
Time to Expiry (Yrs)

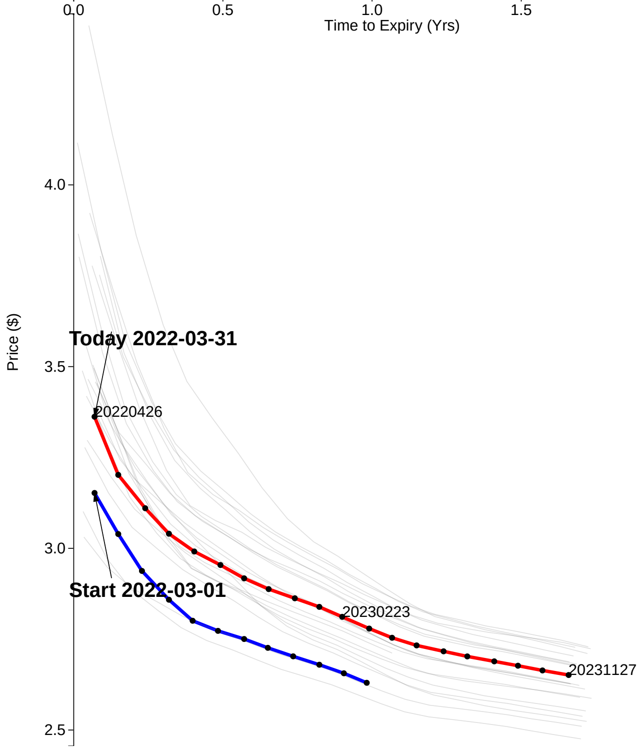

Front Month Dynamics:
Brent Euro Style Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

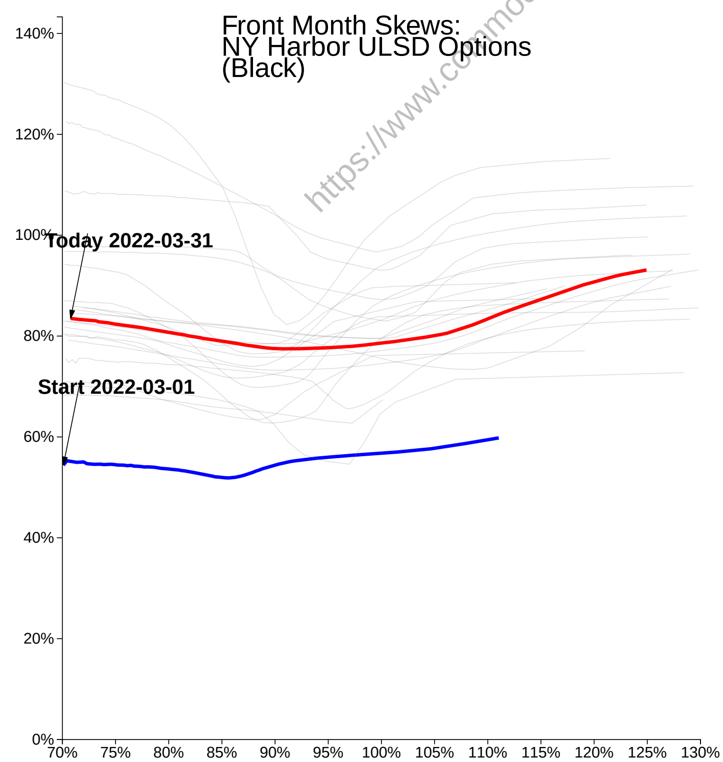

Price ($)
Today 2022-03-31
Start 2022-03-01
20220426
20220726
20231026

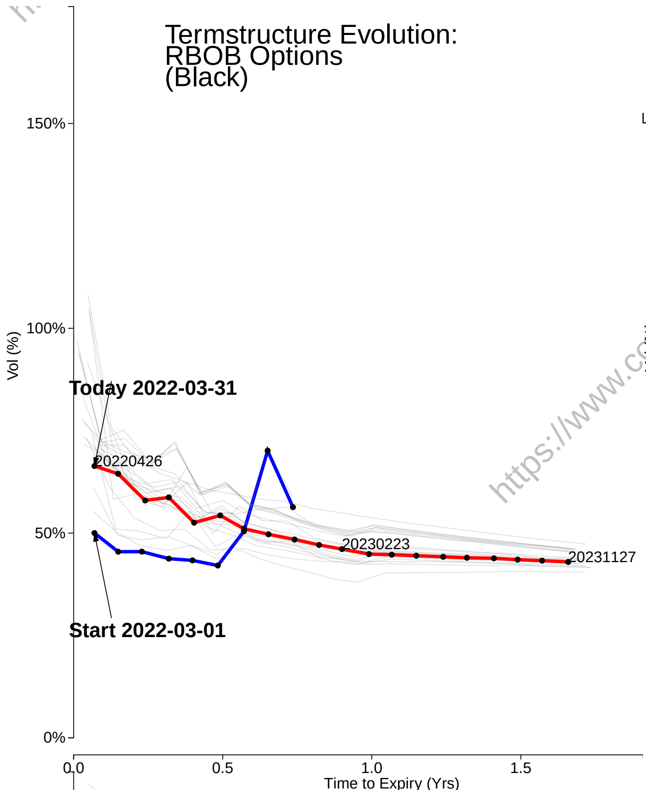

Front Month Skews:
Brent Euro Style Options
(Black)
Today 2022-03-31
Start 2022-03-01

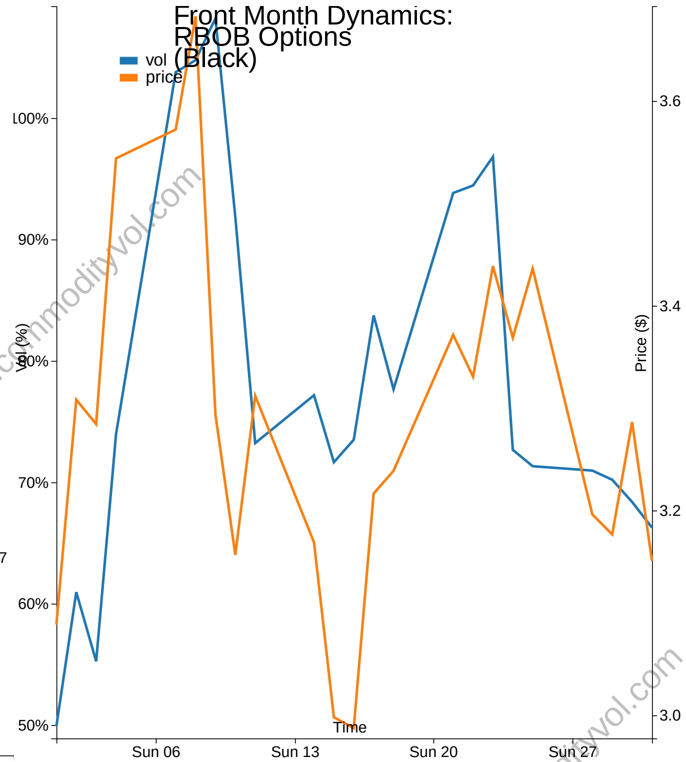

Termstructure Evolution:
NY Harbor ULSD Options
(Black)
Vol (%)
150%
100%
50%
0%
Today 2022-03-31
20220426
20230223
20231127
Start 2022-03-01
0.0
0.5
1.0
1.5
Time to Expiry (Yrs)

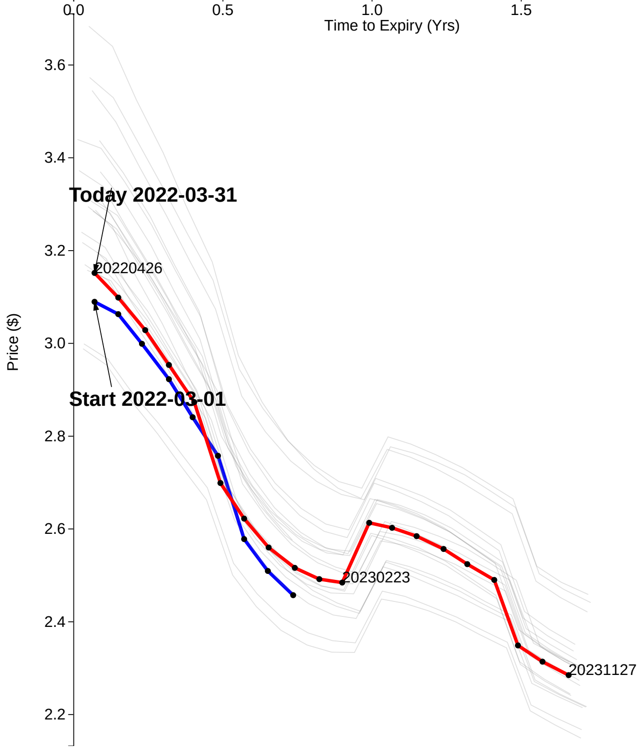

Front Month Dynamics:
NY Harbor ULSD Options
(Black)
vol
price
Vol (%)
Price ($)
100%
90%
80%
70%
60%
4.4
4.2
4.0
3.8
3.6
3.4
3.2
Time
Sun 06
Sun 13
Sun 20
Sun 27

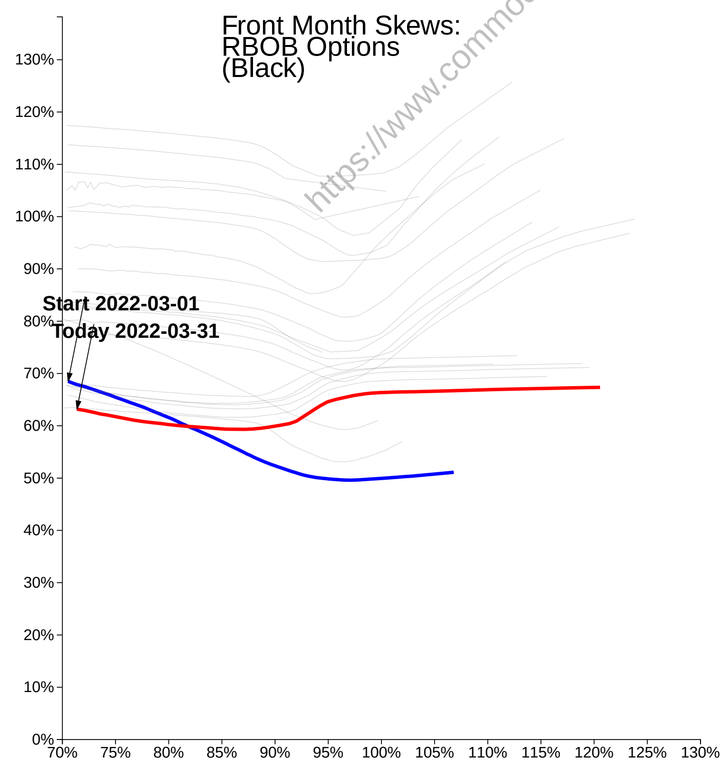

Price ($)
4.0
3.5
3.0
2.5
Today 2022-03-31
20220426
Start 2022-03-01
20230223
20231127

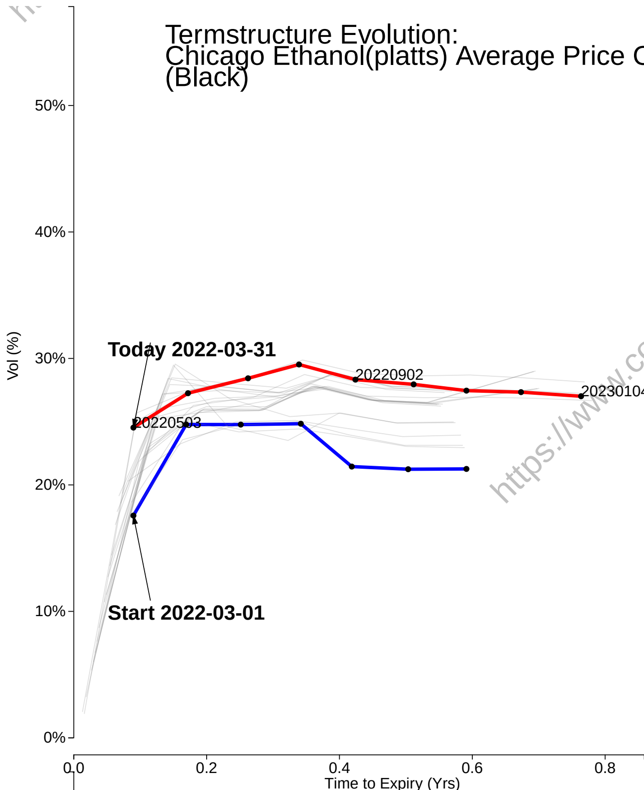

Front Month Skews:
NY Harbor ULSD Options
(Black)
140%
120%
100%
80%
60%
40%
20%
0%
Today 2022-03-31
Start 2022-03-01
70%
75%
80%
85%
90%
95%
100%
105%
110%
115%
120%
125%
130%

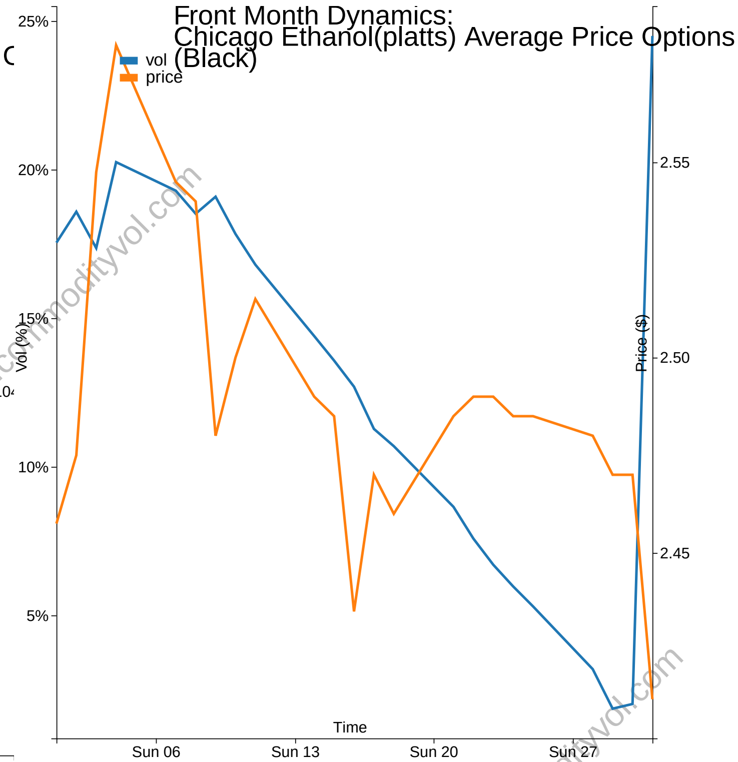

Termstructure Evolution:
RBOB Options
(Black)
Vol (%)
Today 2022-03-31
20220426
20230223
20231127
Start 2022-03-01
Time to Expiry (Yrs)

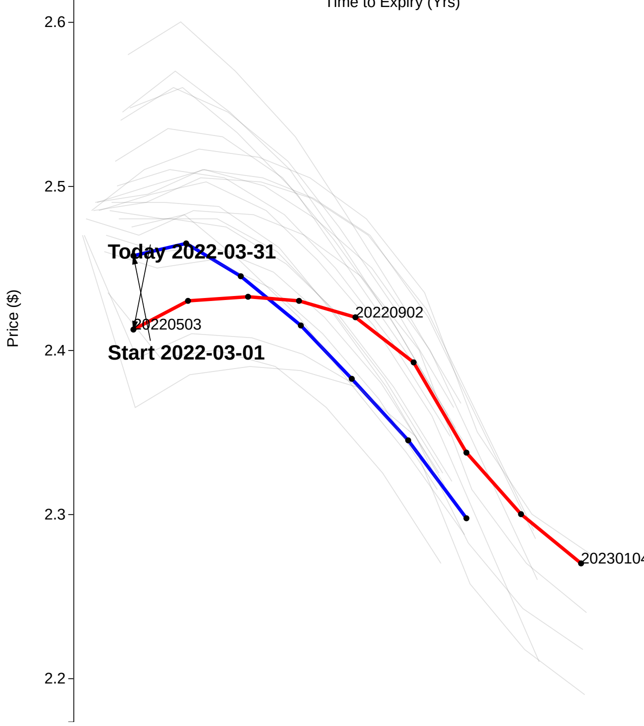

Front Month Dynamics:
RBOB Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

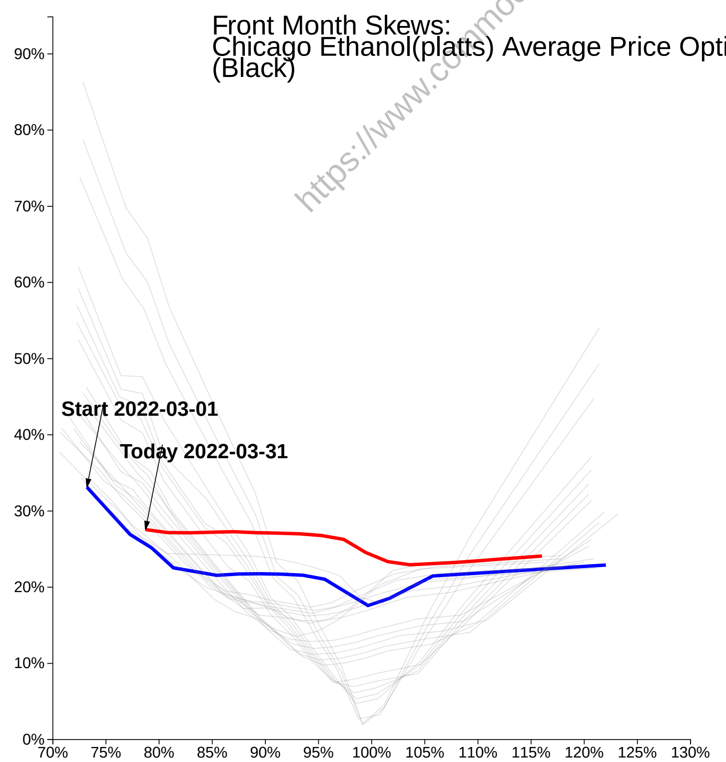

Price ($)
Today 2022-03-31
20220426
Start 2022-03-01
20230223
20231127


Front Month Skews:
RBOB Options
(Black)
Start 2022-03-01
Today 2022-03-31

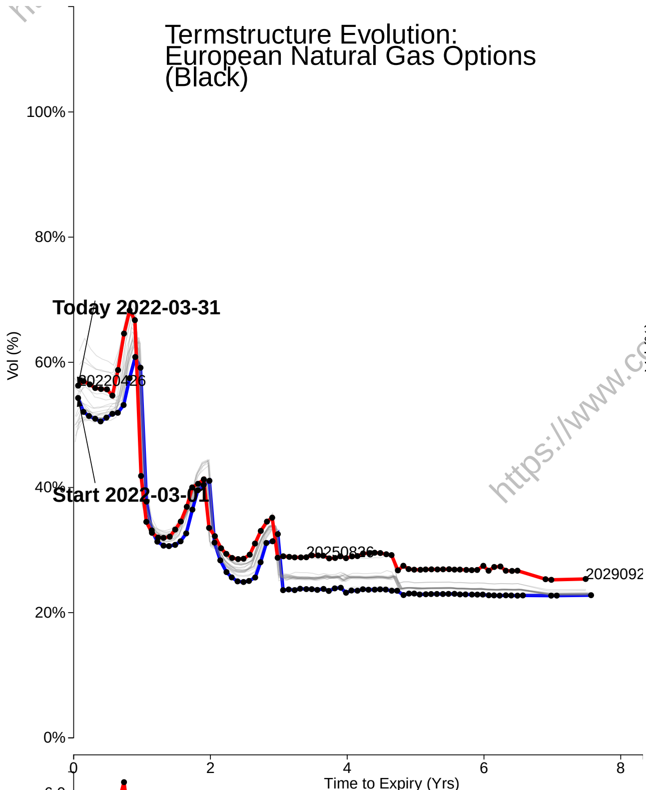

Termstructure Evolution:
Chicago Ethanol(platts) Average Price C
(Black)
Vol (%)
Today 2022-03-31
Start 2022-03-01
20220503
20220902
2023010
Time to Expiry (Yrs)

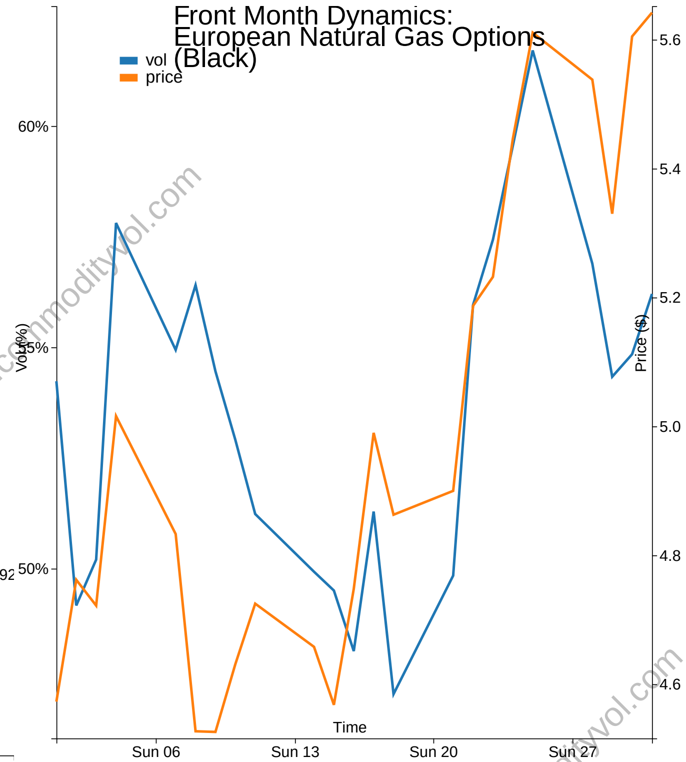

Front Month Dynamics:
Chicago Ethanol(platts) Average Price Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

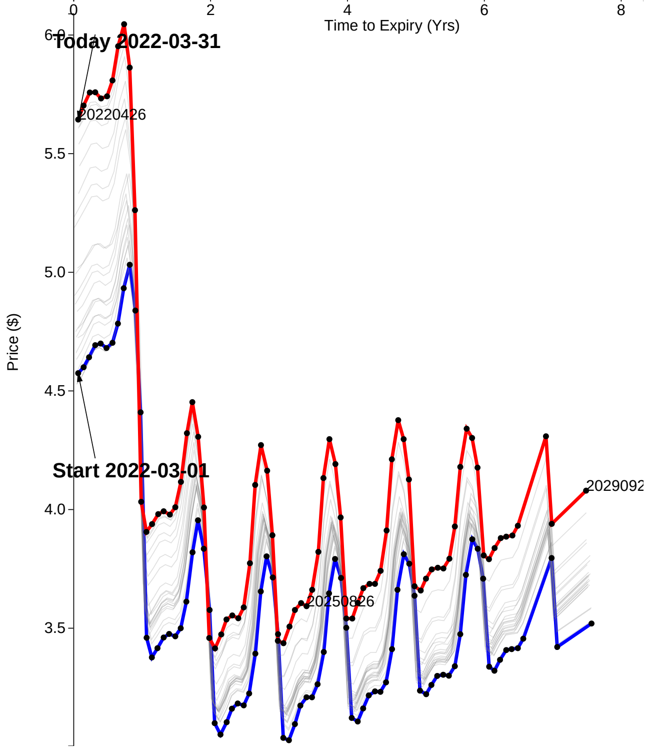

Price ($)
Today 2022-03-31
Start 2022-03-01
20220503
20220902
2023010

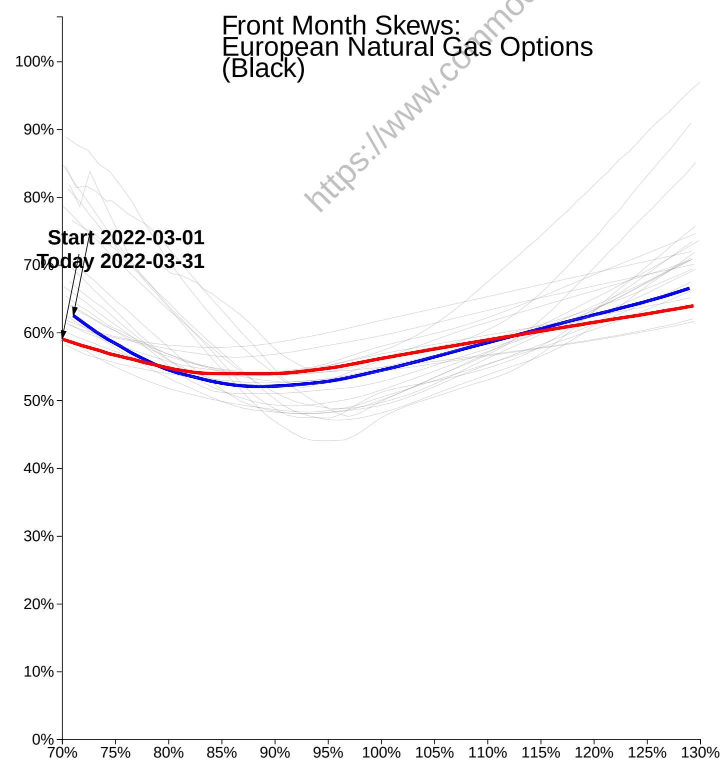

Front Month Skews:
Chicago Ethanol(platts) Average Price Optio
(Black)
Start 2022-03-01
Today 2022-03-31

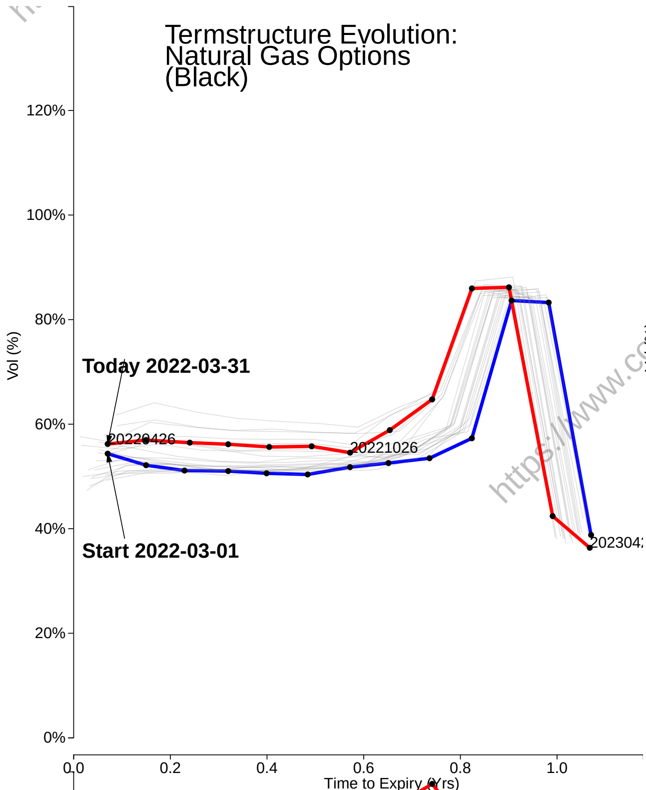
Natural Gas


Termstructure Evolution:
European Natural Gas Options
(Black)
Today 2022-03-31
Start 2022-03-01
20220426
20250826
2029092
Vol (%)
Time to Expiry (Yrs)

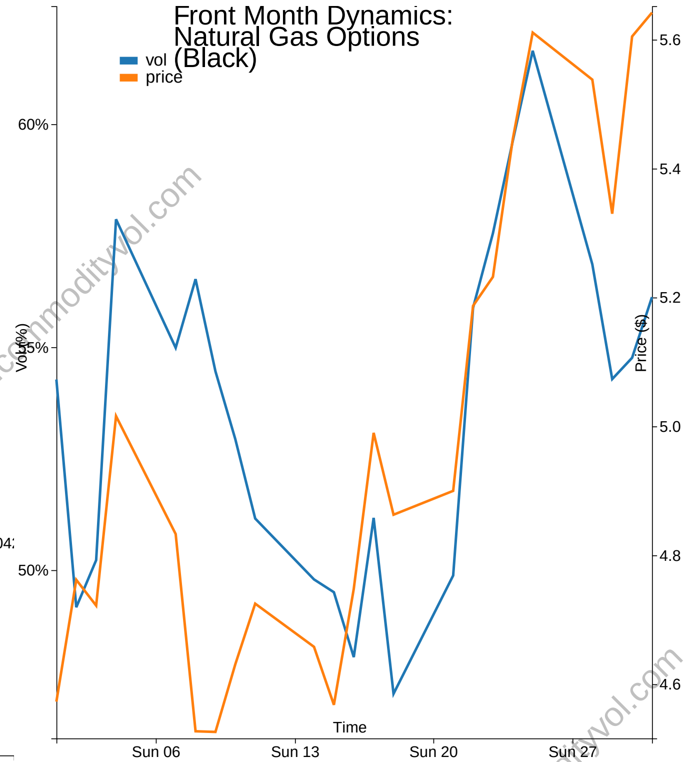

Front Month Dynamics:
European Natural Gas Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27


Today 2022-03-31
Start 2022-03-01
20220426
20250826
2029092
Price ($)

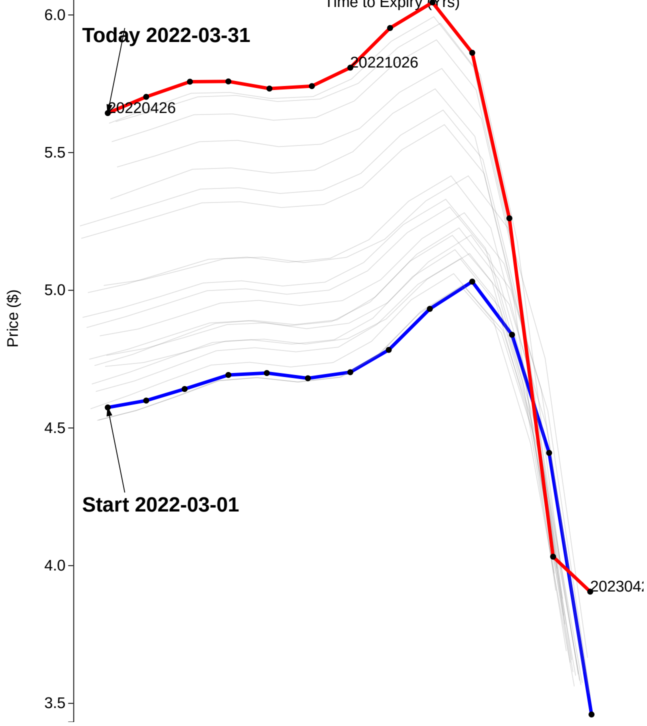

Front Month Skews:
European Natural Gas Options
(Black)
Start 2022-03-01
Today 2022-03-31



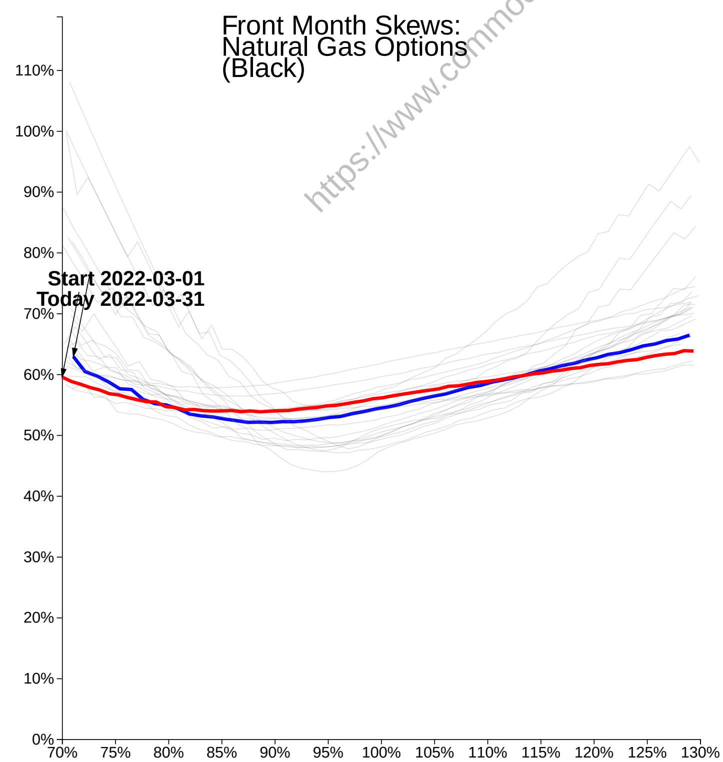
Termstructure Evolution:
Natural Gas Options
(Black)
Vol (%)
Today 2022-03-31
Start 2022-03-01
20220426
20221026
202304
Time to Expiry (Yrs)



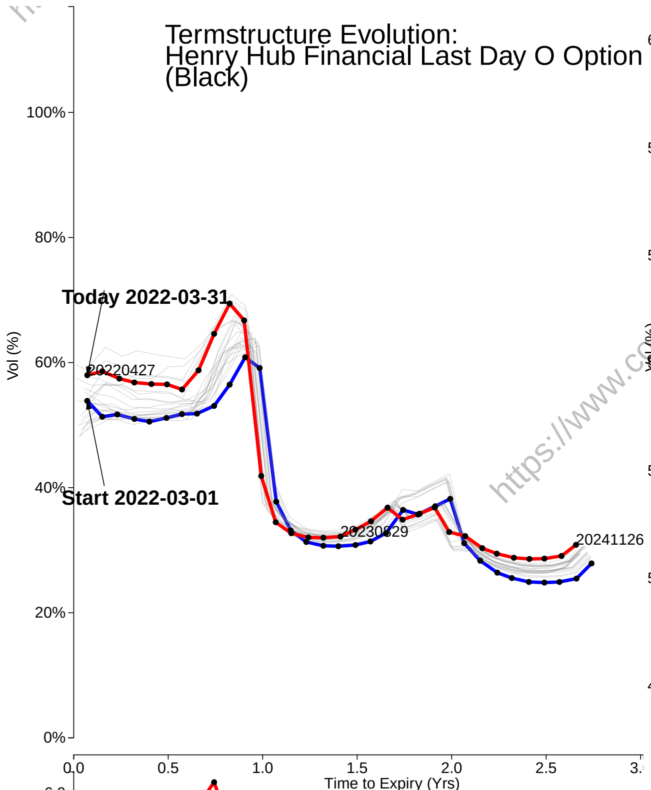
Front Month Dynamics:
Natural Gas Options
(Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

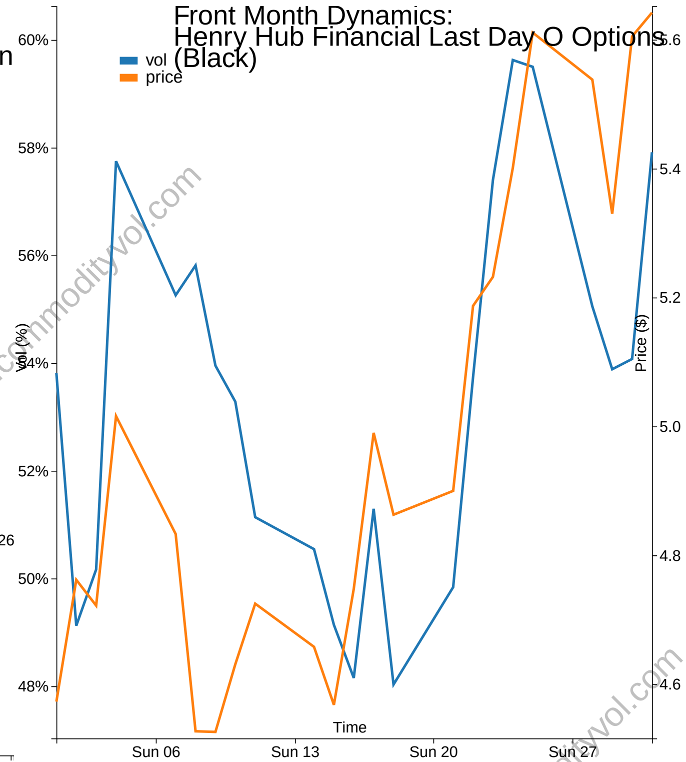


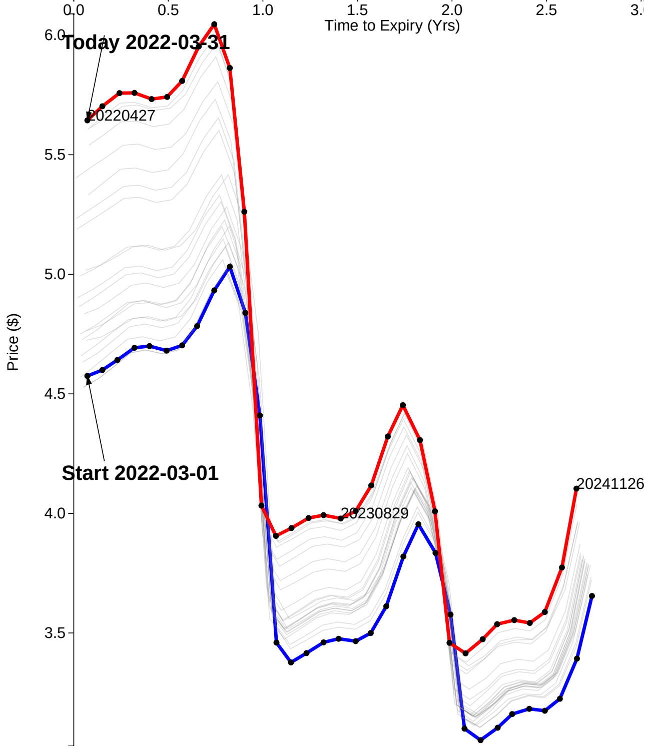
Price ($)
Today 2022-03-31
Start 2022-03-01
20220426
20221026
202304

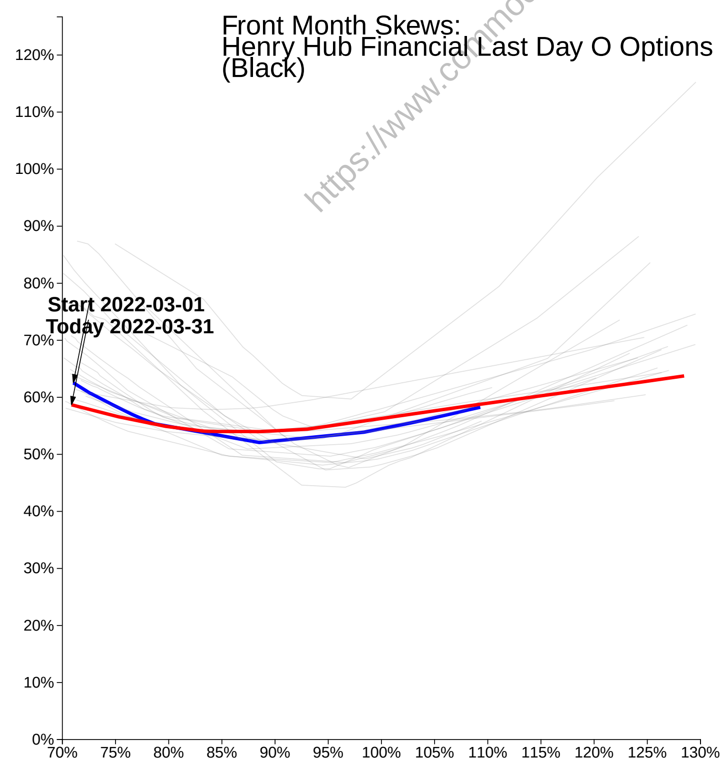


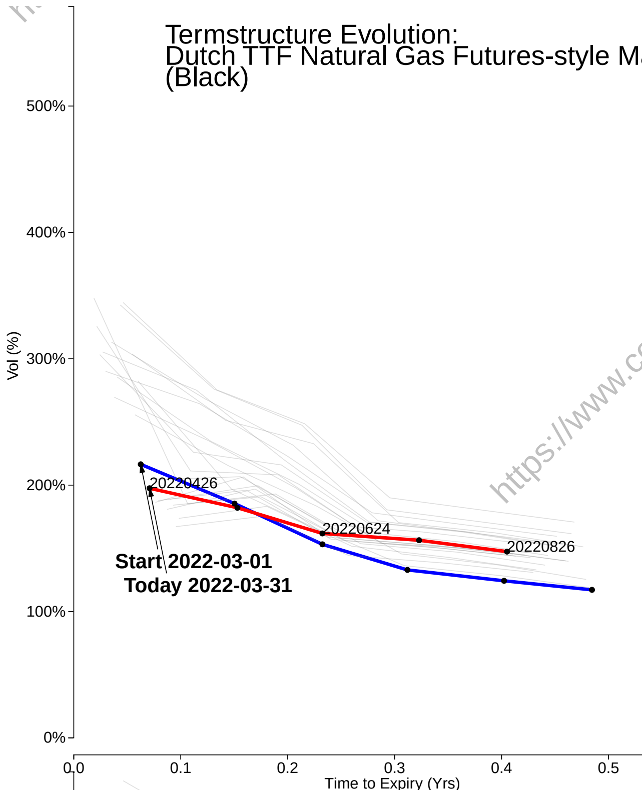
Front Month Skews:
Natural Gas Options
(Black)
Start 2022-03-01
Today 2022-03-31

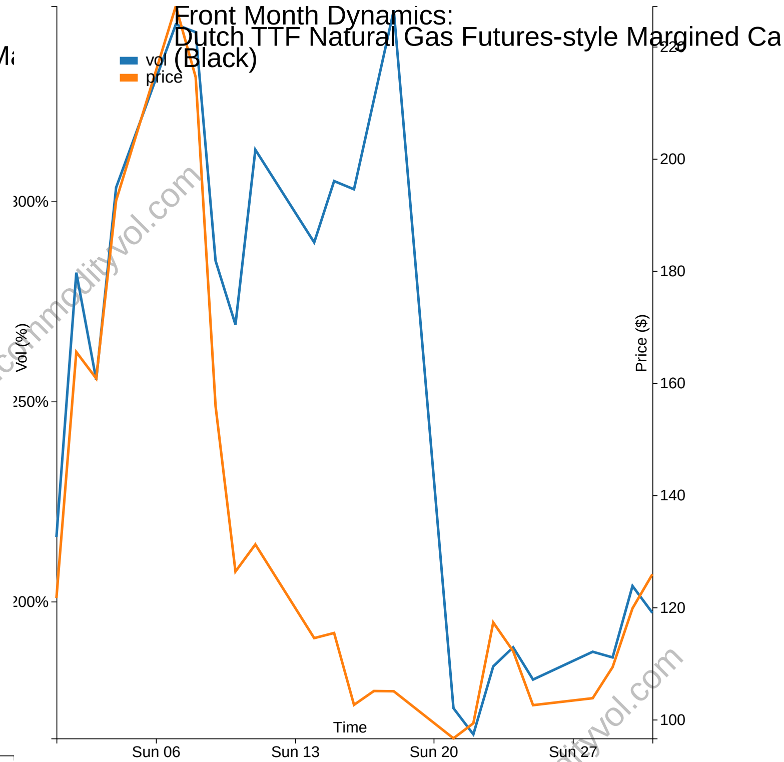

Termstructure Evolution:
Henry Hub Financial Last Day O Option (Black)
Today 2022-03-31
Start 2022-03-01
20220427
20230829
20241126
Vol (%)
Time to Expiry (Yrs)

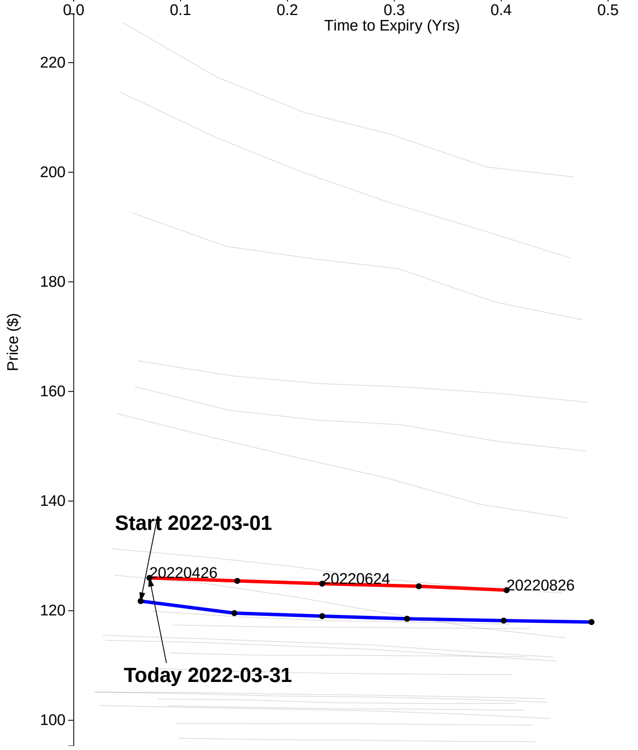

Front Month Dynamics:
Henry Hub Financial Last Day O Options (Black)
vol
price
Vol (%)
Price ($)
Time
Sun 06
Sun 13
Sun 20
Sun 27

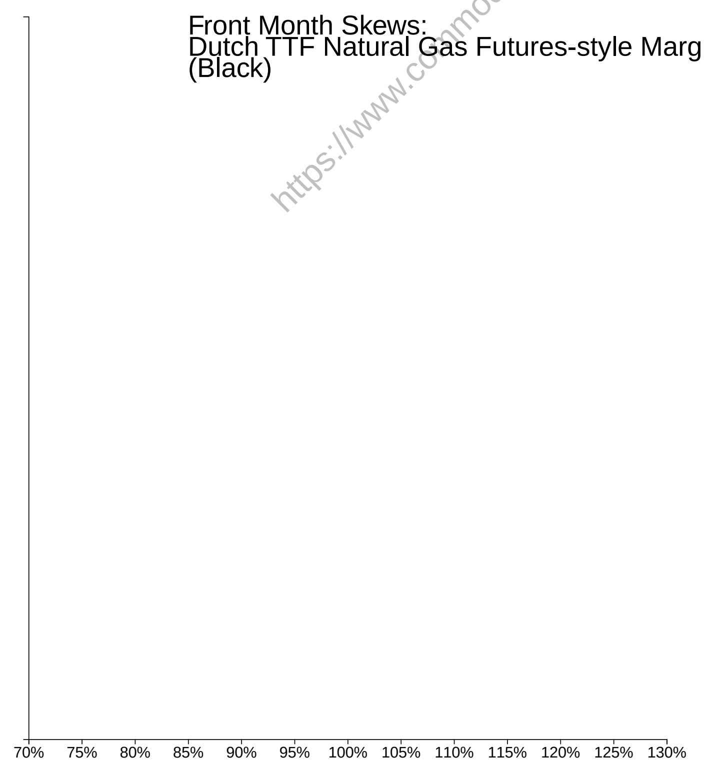

Today 2022-03-31
Start 2022-03-01
20220427
20230829
20241126
Price ($)


Front Month Skews:
Henry Hub Financial Last Day O Options (Black)
Start 2022-03-01
Today 2022-03-31


Termstructure Evolution:
Dutch TTF Natural Gas Futures-style Ma
(Black)
Vol (%)
500%
400%
300%
200%
100%
0%
20220426
20220624
20220826
Start 2022-03-01
Today 2022-03-31
0.0
0.1
0.2
0.3
0.4
0.5
Time to Expiry (Yrs)
https://www.commodityvol.com


Front Month Dynamics:
Dutch TTF Natural Gas Futures-style Margined Ca
(Black)
vol
price
Vol (%)
300%
250%
200%
Price ($)
220
200
180
160
140
120
100
Time
Sun 06
Sun 13
Sun 20
Sun 27


Price ($)
220
200
180
160
140
120
100
Start 2022-03-01
20220426
20220624
20220826
Today 2022-03-31


Front Month Skews:
Dutch TTF Natural Gas Futures-style Margi
(Black)
https://www.commodityvol.com
70%
75%
80%
85%
90%
95%
100%
105%
110%
115%
120%
125%
130%

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