

Table of Contents for OFA Toxic Tools Addon

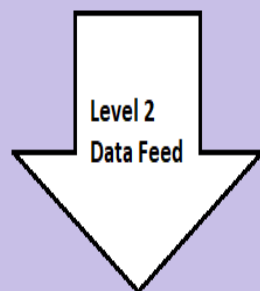
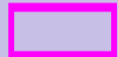
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LEGEND

Existing Addons :



New Addons :



Ninjatrade 8 - Custom NinjaScript - Custom Strategies - Market Analyzer (new Columns and Alerts) - Strategy Builder/Wizard - Alerts via Ninjascript

Imports with separate ZIP file to the main OFA installer. ✨

SharkIndicators
BloodHound

Ninjatrade 8 Charts with OFA added

Bar Strategy Addon ✨

OFA BloodHound Addon ✨

Profile Strategy Addon:ActiveProfile Data ✨

Risk Reward Addon
Dynamic RR Integrated
with OFA Profiles

OFA Order Book LOB
Addon Tools for OFA
Auctions. Book Lines
and Candle modes. ✨

Order Flow Analytics OFA Environment

ALGOX
Algorithmic trading interface
Risk Management / Algo
trading - Compound Account

BONUS OFA
Indicators with
Bundles.
OFAWaveVolume
OFATimeHistogram

OFA Absorption &
Ratio Addon with
Stop Run Analysis
SRA & Exhaust
Filter

OFA Toxic Tools
Addon & Sequential
Incline/Decline
Tools - 3 components

Alert Volume/Wave
Histogram/Bars

Block & Speed Tick
Addon. Dynamically
highlights key HFT
Block Speed Activity

DELTA Addon Tools &
Order Flow Imbalance
Tools . Swing Ratio tools.

Advanced Profile Addon
Expand Volume Profile tools of OFA
with new profile indicators/variables
and evolving Historical data lines

Ninjatrade 8 Environment

OFA Toxic Tools Addon Overview

The features of this Addon have been in R&D for a year and a half with observations and refinements and additions made over time.

As with other OFA Addons some of these tools will resonate with different groups of users and their trading process. The objective is to graphically highlight and bring to the foreground key order flow information to facilitate reading the structure and the unfolding OFA auction process.

Building upon the Alerts and Sequence Dots which represent bar by bar toxicity we have now expanded this to include analysis of zones between auctions and comparative analysis between each Auction Range. You will observe particularly with the OFA Probe and Rotation Bars which gives a much clearer truer picture of the order flow vs standard seconds/minute bars ; and how we get additional clues and insights to the Auction process and when a change takes place. Remember with Minute and Seconds bars price is sliding up and down and over various price level zone which results in key patterns not being as visible or discernable.

These zones are of particular interest to the Market Makers who detect these fast changes and for reasons why to be explained in the following paragraphs. Market makers as highlighted in the OFA Book Addon materials are providing liquidity on the bid / offer spread and take the other side of the market orders.

To facilitate tracking zones and auction bar(s) / cluster of auctions where toxic auctions occur some New tools have been added to the OFA toolset. These are areas where the market makers react to some activity by removing one side of the market depth (referred to as withdrawal of liquidity in the OFA Book Addon documentation). These are highlighted and illustrated with some of the tools and graphic output from the indicators.

First of all let's revisit for context the OFA Definition of Toxic order flow which has been natively part of our toolset since the OFA for NT8 launch. Some examples of this covered in the **FAQ** – included in appendix 1 in this document for convenience and within the FAQ link on the download page of the Website.

Summary of FAQ here : The Alerts and sequences of these (ie. A contiguous grouping of 3 (default)), highlight prices/zones where the market has an easy path to move up or down quickly based on the current microstructure of the order flow at the bid/ask price levels. This then highlights areas where liquidity was pulled/withdrawn on one side resulting in the easier path up or down for price.

Some background on Market Makers and Order Book: See Appendix 2/II for general overview of this.

In simple terms without unnecessarily getting into the complexities of Market Marker MM model : consider the following

MM are non directional typically – no one other than the MM can state the specifics of this but this is a well observed process than can be seen every day on our charts. MM need to rotate to mitigate risk and balance their inventory as price moves up and down with each auction/candle & Swing. This is in addition to profiting from the difference in the bid-ask spread.

Hedging their position to offset their risk with other products is also part of this but not the subject of this document.

Market makers are typically (but not in all instances of Banks/Financial firms) not interested in a directional bias and thus their desire is to remain delta neutral and to proactively be balancing their inventory in the unfolding swings and cycles of the market. They make the most money in bracket and range zones and most seasoned traders now know that the markets range to a far greater degree than they trend.

With these tools we are highlighting price areas where some of the Fast & Slow (Withdrawal of liquidity on one side of the market) activity occurs and the Fast and slow rhythm to the price auctions in some areas. It will be noted as you go through this document and the case studies and charts, that there is a repeatable consistent pattern here in the current order flow and in the history ; to learn to recognise this price action more readily.

This then better equips you in reading the order flow and prepares you to be more discerning and patient with your trade entry and execution process.

As part of the analysis and structure analysis of the OFA Auctions one can observe that often any pull back opportunity is a slow grind back to the origin of the Toxic Auction. Informed traders can then add to their position & market makers are able to rebalance their inventory and prepare for continuation in the same direction of the toxic auction. See Appendix 3 for outline of Japanese candlestick pattern similarity.

Gap zones represent zones where we have more of a relative imbalance of one side resting orders in the limit order book (LOB). For example in an Up move, any sellers in that area will have been trapped as buyers drove the price away quickly combined with Market maker WOL (Withdrawal of liquidity) on the ASK/OFFER side. When price returns we can observe the price action as buyers who were locked out or missed the trade have an opportunity for entry and prior buyers can defend their buying position. Part of this toolset additionally highlights these Gap zones and you will observe the testing of these price zones on any pull-backs.

Also we will have the FOMO (Fear of missing out)/late buyers who chased the faster move and bought at a terrible price and Market makers and those on limit order Ask side rotate price slowly back to the origin of the Fast/Toxic Auction.

The key components within this group of tools are :

- **Sequential Decline/Incline tools** – increase in bid/ask volume from the lows moving up – increase in the bid/ask volume from the highs moving down .. three options to filter and highlight when valid for three, four and five rows of auction bar.

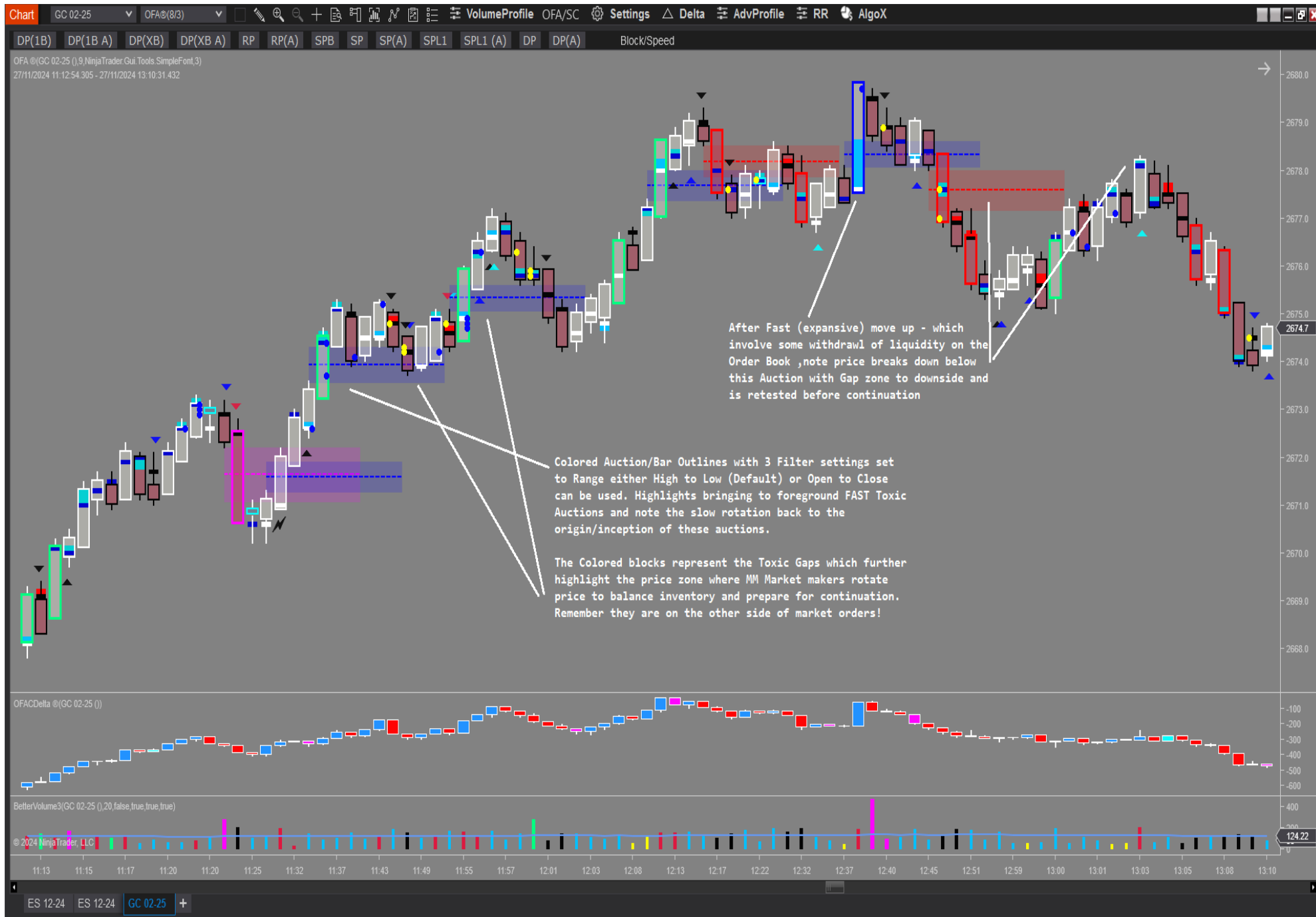
Absorption pattern within the 3 / 4 or 5 row map – this captures for an Up Auction, an increase in bid/ask volume from price levels above into the lows (most likely on the Bid). For a Down Auction, an increase in bid/ask volume from the price levels below into the Highs (most likely on the Ask).

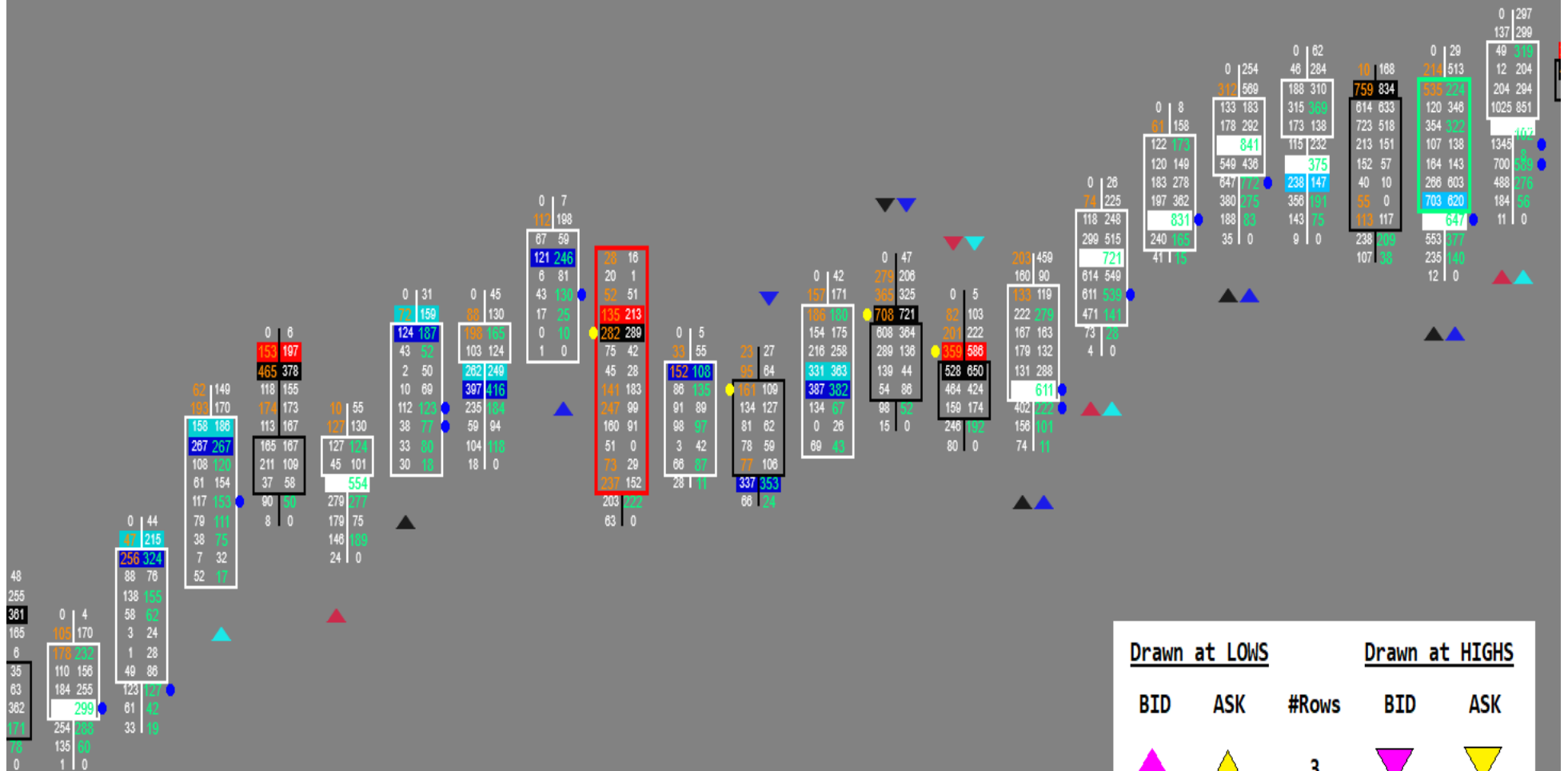
- **Toxic Gaps** – with three filter settings and color maps to use to highlight these individual filter settings. Highlights a momentum change in the order flow between auctions combined with a WOL (Withdrawal of liquidity); results in a fast move away from a price zone.
- **Toxic Auction/Candle Outlines** – with three filter settings and color maps, highlights extended range of OFA Auction bar. This brings to the foreground to then observe subsequent auctions pulling back into this zone of the Fast Auction Up or Down. See Appendix 3 for outline of Japanese candlestick pattern example of this.
- **Feature recently added** – For live developing auction for Probe and Rotation ; the Price Level on either side, that the Auction needs to reach to satisfy the Probe condition of the Bar. Can also see markers for history where the Probe was reached if you want to research prior auctions and history for your current Probe & Rotation settings. This feature will also be added for Range bars when the Rotation is set to 0 in next release.

The following Graphics quickly highlight and summarise some of these features :

Before proceeding to the key feature and Benefits here is a quick overview and example highlighting the main components.

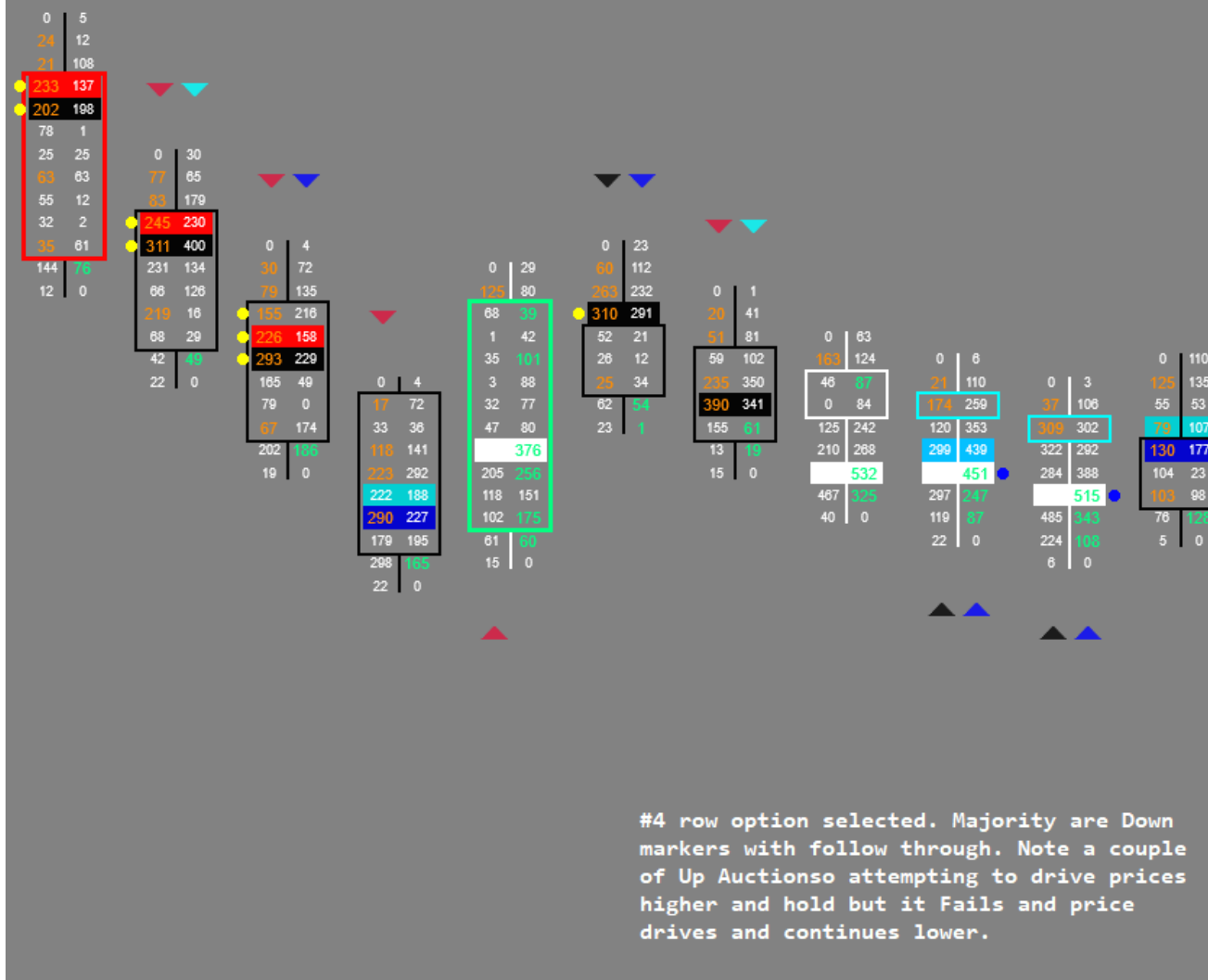
Page 6 through 10



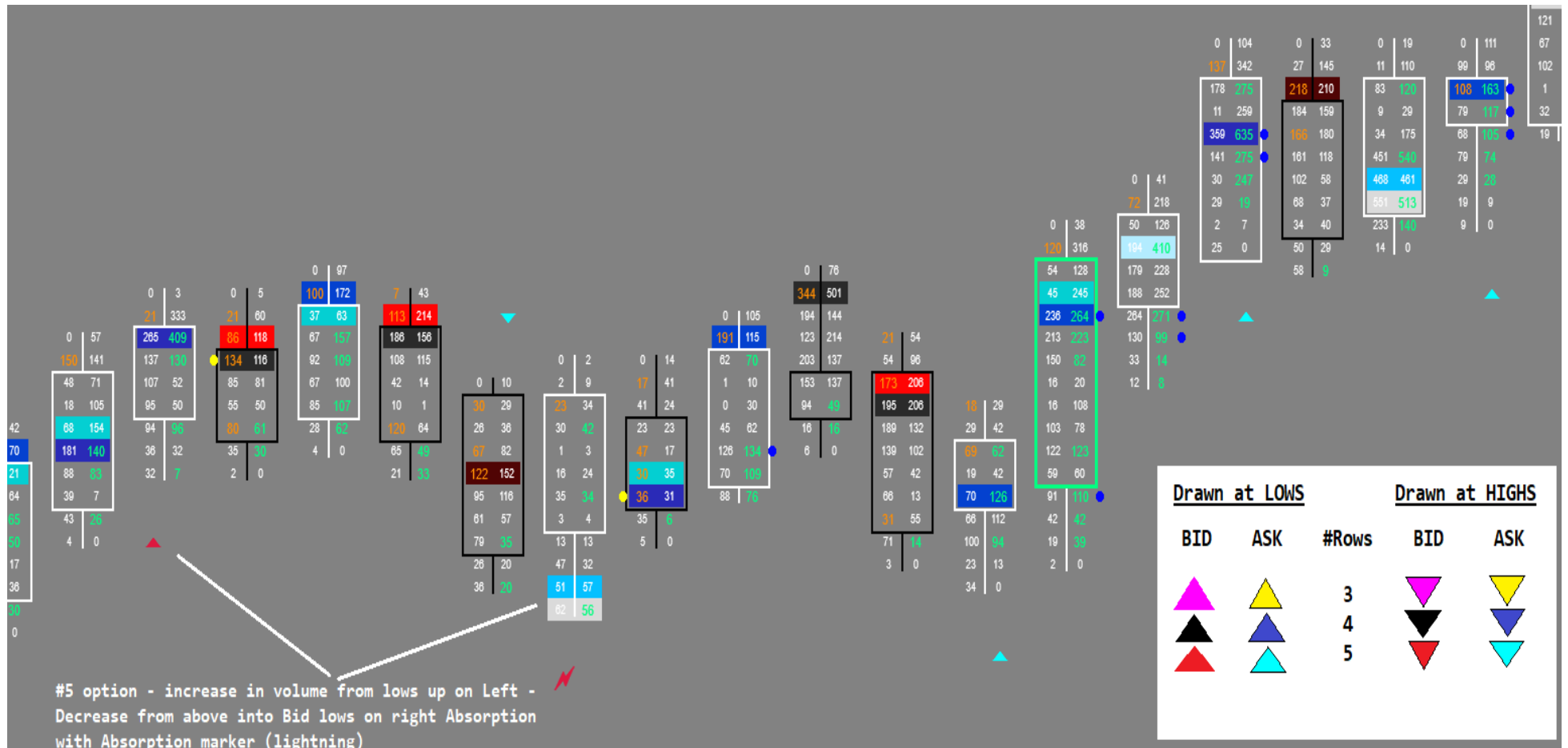


#4 row option enabled. Note predominance of Up arrow markers - a couple of Down auction rotations are broken quickly by Up Auctions. Is normal to have some down rotations with attempts to Sell and drive prices lower (note Alerts) but this selling is absorbed and continues the current Up trend

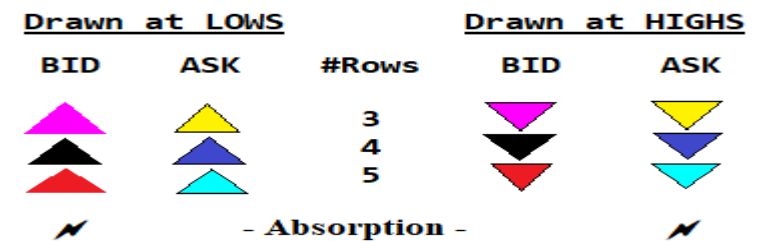
Drawn at LOWS			Drawn at HIGHS	
BID	ASK	#Rows	BID	ASK
		3		
		4		
		5		



Drawn at LOWS			Drawn at HIGHS	
BID	ASK	#Rows	BID	ASK
		3		
		4		
		5		



Example of Exhaustion marker at highs see Case study on page # for 2 4 row examples (at the Ask)



Key Features/Benefits of the Toxic Tools Addon

The **OFA Toxic Tools Addon** is a specialized set of tools developed to enhance order flow analysis by visually highlighting key market structure and auction dynamics. This addon builds upon **Alerts and Sequence Dots**, expanding analysis to **zones between auctions** and comparing auction ranges for better clarity on market movements.

Key Features & Benefits:

- **Toxic Order Flow Analysis:** Identifies areas where liquidity is withdrawn, creating price zones with easy movement potential. Observe more clearly when we have the Fast followed by the slow auction process building volume and MM balancing and preparing for the next break and continuation in price. From the history of the prior price action and structure you will build more confidence to spot and interpret these key areas for analysis and probable direction
- **Market Maker Activity Tracking:** Highlights where market makers adjust inventory, withdraw liquidity, and balance their books.
- **Auction & Structural Analysis:** Uses **OFA Probe and Rotation Bars** for a more accurate order flow picture than standard time-based bars.
- **Gap Zones & Toxic Auctions:** Identifies price areas where liquidity was removed, leading to fast price movements, and tracks re-tests of these zones.
- **Sequential Decline/Incline Tools:** Highlights volume shifts in the bid/ask to detect continuation or reversal points. Using the sequential markers based on 3 / 4 or 5 rows of bid ask data it helps to highlight probability of continuation of the current direction in price. The bid / ask orderflow from the lows for an Up Auction or from the High for a Down Auction ; is captured and marked without the need to read the Print in Print mode and is visible in Structure Mode.
- **Absorption Patterns & Toxic Gaps:** Captures volume absorption within key price levels and highlights momentum shifts.
- **Fast vs. Slow Auction Dynamics:** Helps traders identify accumulation vs. distribution phases and interpret market maker behaviour.

Practical Applications:

- **Trade Execution & Timing:** Helps traders refine entries by identifying high-probability pullbacks and continuation setups.
- **Order Flow Pattern Recognition:** Enables users to spot liquidity traps, rebalancing, and shakeout zones.
- **Market Context Awareness:** Aligns with market maker strategies to avoid common retail trading pitfalls.
- **Risk Management & Confirmation:** Helps confirm breakouts, reversals, and liquidity tests to improve trade confidence. Tools assist achieving better Risk to reward and refining entry / execution process.

By integrating these tools, traders can develop a more nuanced understanding of order flow, aligning strategies with market maker models to improve execution and decision-making.

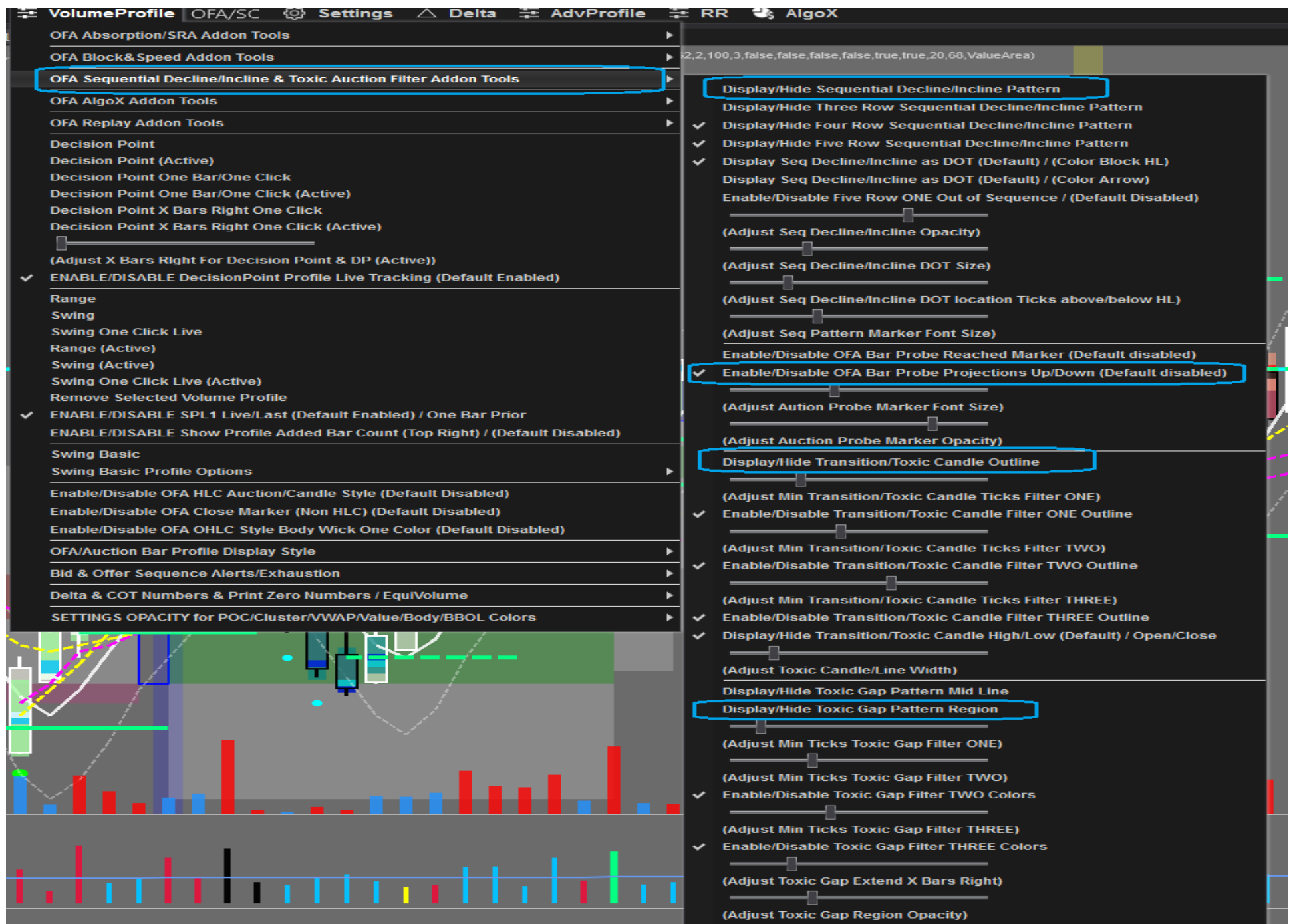
Key Considerations and Patterns :

- Since the aim of market is to confuse / misdirect particularly in areas of accumulation for Long/Short – this is why in essence they need volume **bids/market sells** in order to accumulate long position & **offers/market buys** to accumulate a short position – work with this model and fast / slow toxic process to improve your read of the order flow and the Why of some of these moves. With practice and experience and observing from the history and similar patterns you can be more patient with these structure plays.
- to clarify what has been called Fair value gap - we call Toxic gap – due to the fast toxic move, the value bias is more likely higher than at the toxic gap price zone for a long – so is an opportunity for a discount on long and a premium on sell when observing this order flow activity.
- This can help you to slow down your entry process and facilitate patience in waiting for the pullback and getting a better price and not chasing momentum randomly – assess probabilities and odds of losing to the market order chase vs virtue and value and the WHY of waiting for the pullbacks to these zones of toxic Gap and the Toxic Auction/Candle color coded by size grouping
- Helps to outline better the auction process and when Withdrawals/Pulls of liquidity (WOL) occur by the Market makers who are on the other side on the limit order book. Some news events obviously continue to move higher or lower with very large auctions – you can observe when levels are retested before continuation but also note the second/millisecond timing of the surge of ticks for these releases and unless very prepared and skilled ; wait for this price/tick action to settle.
- Observe pattern where price breaks through a Gap zone and then retests. Example for a long look for break below a long support gap zone or a break above a resistance gap zone. This is information that the move above was likely for liquidity / rejection to sell at higher prices at premium. Add this to your narrative as you follow the structure changes. As an example of a Long Toxic Up Auction - highlight areas where structure is broken below, and we have sellers at lower prices. We have buyers willing to let price fall through – or break in structure above a Sell Gap zone and buyers at higher prices.

When you observe the expanded Fast OFA Auctions – consider the presence of Informed traders, and thus can utilise to help identify these price zones. When price breaks the structure of the origin of the fast move consider is a fake / shakeout down or upthrust up move rejection a price area – whilst building more size via the stop run liquidity zones. Look for a test into this area before continuation in the opposite direction.

Menu Settings for Addon (Sub menu to Volume Profile Menu)

See graphic on the next page.



OFA Toxic Tool Parameters in the above Screenshot Figure

To enable/modify the parameters for the Addon ; Open the Sub Menu as highlighted above in the Volume Profile Main Menu – 'OFA Sequential Decline/Incline & Toxic Auction...!.

Sequential Decline/Inline Pattern Section : - most of these are self-describing as to their function

Display/Hide Sequential Decline/Incline Pattern

Display/Hide Three Row Sequential Decline/Incline Pattern

Display/Hide Four Row Sequential Decline/Incline Pattern

Display/Hide Five Row Sequential Decline/Incline Pattern

Display Seq Decline/Incline As DOT (Default) / (Color Block HL) – see figure X for the color mappings for 3 4 5 rows and exhaustion marker

Display Seq Decline/Incline As DOT (Default) / (Color Arrow) – option to use Arrow marker or DOT

Enable/Disable Five Row ONE Out of Sequence / (Default Disabled) – for Five row pattern this allows one of the rows to not follow sequence

Adjust Seq Decline/Incline Opacity

Adjust Seq Decline/Incline DOT Size – defines the dot size of marker when set to Dot mode / Arrow mode or Block mode

Adjust Seq Decline/Incline DOT Location Ticks above/below HL)

Adjust Pattern Marker Font Size – for the arrows when selected this increases/decreases the size of these

Auction Probe Reached/Projections Section :

Enable/Disable OFA Bar Probe Reached Marker (Default disabled) – when enabled this shows bars/auctions that closed where the close probe price was.

Enable/Disable OFA Bar Probe Projections Up/Down (Default disabled) – this only shows the live right side bar – will show markers for above and below until the Probe size is reached - if using 8/4 – until 8 ticks is reached between high and low both projections for the probe size will show

Adjust Auction Probe Marker Font Size – increase/decrease the font size to see a larger/smaller arrow marker

Adjust Auction Probe Marker Opacity

Transition/Toxic Candle/Auction Section :

Display/Hide Transition/Toxic Candle Outline

Adjust Min Transition/Toxic Candle Ticks Filter ONE

Enable/Disable Transition/Toxic Candle Filter ONE Outline

Adjust Min Transition/Toxic Candle Ticks Filter TWO

Enable/Disable Transition/Toxic Candle Filter TWO Outline

Adjust Min Transition/Toxic Candle Ticks Filter THREE

Enable/Disable Transition/Toxic Candle Filter THREE Outline

Display/Hide Transition/Toxic Candle High/Low (Default) / Open/Close

Adjust Toxic Candle Line Width

Toxic Gap Pattern Section :

Display/Hide Toxic Gap Pattern Midline – show midline for each of the Gap regions using line style settings in OFA parameters

Display/Hide Toxic Gap Pattern Region

Adjust Min Ticks Toxic Gap Filter ONE

Adjust Min Ticks Toxic Gap Filter TWO

Enable/Disable Toxic Gap Filter TWO Colors

Adjust Min Ticks Toxic Gap Filter THREE

Enable/Disable Toxic Gap Filter THREE Colors

Adjust Toxic Gap Extend X Bars Right – option to extend the Gap zones using Slider setting – suggested 10 to start

Adjust Toxic Gap Region Opacity

How to change the Range of the Sliders for Toxic Outline & Toxic Gap :

Parameter in the OFA Group to set the size of the Menu sliders for Toxic Candle Ticks Filter

In the OFA Indicator Parameters – Group Section Sequential/Toxic Analysis Parameters

Max Toxic Ticks Slider – this is the 4th parameter in the Group – reload indicator after making changes to these settings

set to 100 for QQQ – others is 50 (max 5000) – can increase to X

Max setting for the gaps also : Max Toxic Ticks GAP Slider – the 3rd in the Group of parameters Sequential/Toxic Analysis Parameters.

The following two diagrams outline all the internal OFA Parameter Indicator settings. Mostly those that user is likely to change are commented on. Colors for each of :

Toxic Candle / Auction Filters One,Two and Three

Toxic Gap Zones Filters One,Two and Three

the Long / Short Patterns for Sequential Incline / Decline colors for 3 row / 4 row & 5 row Patterns.

The Max setting for the Toxic Candle Outline Filters & Gap Zone Size is changed here in the Parameters and will update on reload of chart indicators.

For some instruments either OFA Seconds/Minutes or Larger Probe Rotation settings may require more Ticks for your Filter settings.

Properties

RR default entry

RR default stop

Sequential/Toxic Analysis Parameters

Up Bar Toxic Outline Color

Down Bar Toxic Outline Color

Max Toxic Ticks Slider

OFA Toxic Candle Min Ticks

Display Toxic Candle Outline

Display Toxic Candle Outline with High/Low (Default) / Open/CI...

Enable/Disable Toxic Candle Outline Filter TWO

OFA Toxic Candle Min Ticks Filter TWO

Up Bar Toxic Outline Filter TWO Color

Down Bar Toxic Outline Filter TWO Color

OFA Seq Incline Pattern Opacity

Long Seq Incline 3 Row Pattern Color

Short Seq Incline 3 Row Pattern Color

Long Seq Incline 4 Row Pattern Color

Short Seq Incline 4 Row Pattern Color

OFA Seq Incline Pattern Dot Size

OFA Seq Incline Pattern Ticks HL

Enable/Disable Seq Inc & Absorption Pattern

Seq Pattern Font Size

Enable/Disable Seq Pattern Probe Direction (Default / (High or...

Enable/Disable Seq Pattern Three Rows

Enable/Disable Seq Pattern DOT (Default) / (Color Block)

Enable/Disable Seq Pattern Four Rows

Enable/Disable Seq Pattern Five Rows

1

1

Solid, 3px

Solid, 3px

70

12

40

Solid, 3px

Solid, 3px

50

Solid, 3px

Solid, 3px

Solid, 3px

Solid, 3px

5

4

12

Toxic Candle Outline Colors for Filter ONE / 1

Change the Max Slider value for each of the Toxic Candle Filters 1,2 & 3.

Color Settings for each of the tools :

Toxic Outline 1,2,3 Seq/Decline Colors for each of Long and Short for 3,4,5 row patterns.

Increase/decrease size of Seq Pattern Symbol chosen Dot/Arrow

Stores the current value of each of the menu Settings for each section.

Enable/Disable Seq Pattern Four Rows

Enable/Disable Seq Pattern Five Rows

▶ Long Seq Decline/Incline 5 Row Pattern Color

▶ Short Seq Decline/Incline 5 Row Pattern Color

Enable/Disable Toxic Candle Outline Filter THREE

▶ Up Bar Toxic Outline Filter THREE Color

▶ Down Bar Toxic Outline Filter THREE Color

OFA Toxic Candle Min Ticks Filter THREE

Enable/Disable Toxic Candle Outline Filter ONE

Enable/Disable Seq Pattern DOT (Default) / (Color Arrow)

Enable/Disable Allow One Row Out of Seq Five Row (Default D...

Enable/Disable Display of OFA Toxic Auction Gap (3 bar pattern)

▶ OFA Toxic Gap Pattern Filter ONE Support Color

▶ OFA Toxic Gap Pattern Filter ONE Resistance Color

OFA Toxic Gap Filter ONE Minimum

OFA Toxic Gap Filter TWO Minimum

OFA Toxic Gap Region Opacity

OFA Toxic Gap Extend X Bars Right

▶ OFA Toxic Gap Pattern Filter TWO Support Color

▶ OFA Toxic Gap Pattern Filter TWO Resistance Color

OFA Toxic Gap Filter THREE Minimum

▶ OFA Toxic Gap Pattern Filter THREE Support Color

▶ OFA Toxic Gap Pattern Filter THREE Resistance Color

Enable/Disable use of OFA Toxic Auction Gap Filter TWO

Enable/Disable use of OFA Toxic Auction Gap Filter THREE

OFA Toxic Candle/Line Width

Enable/Disable Display of OFA Toxic Auction Gap (3 bar pattern...

▼ Settings Parameters


Settings Label Color


Option To Increase Print Alert Bid/Ask Width

Min Print Bar Width


Option to use Min Print Bar Width (Default true)




 Solid, 3px

 Solid, 3px



 Solid, 3px


 Solid, 3px


50



Use DOT or Arrow Pattern

For 5 Row pattern allowed 1 row out of sequence ie not increasing/decreasing

 Dash, 2px


 Dash, 2px


4

10


30


3

 Dash, 2px

 Dash, 2px

16

 Dash, 2px

 Dash, 2px



3



 White



45



Color Settings for the :

Toxic Candle Outlines

Toxic Gap Zones

Seq Decline/Incline Colors

Color settings for Gap
Zone filter 1.

Stores current setting on
the Drop Down Menu for
each value.

More Color Settings for
the Gap Zone filters 2
and 3.

Width of the Toxic
Candle Body Outline

template

OK

Cancel

Apply

Case Studies

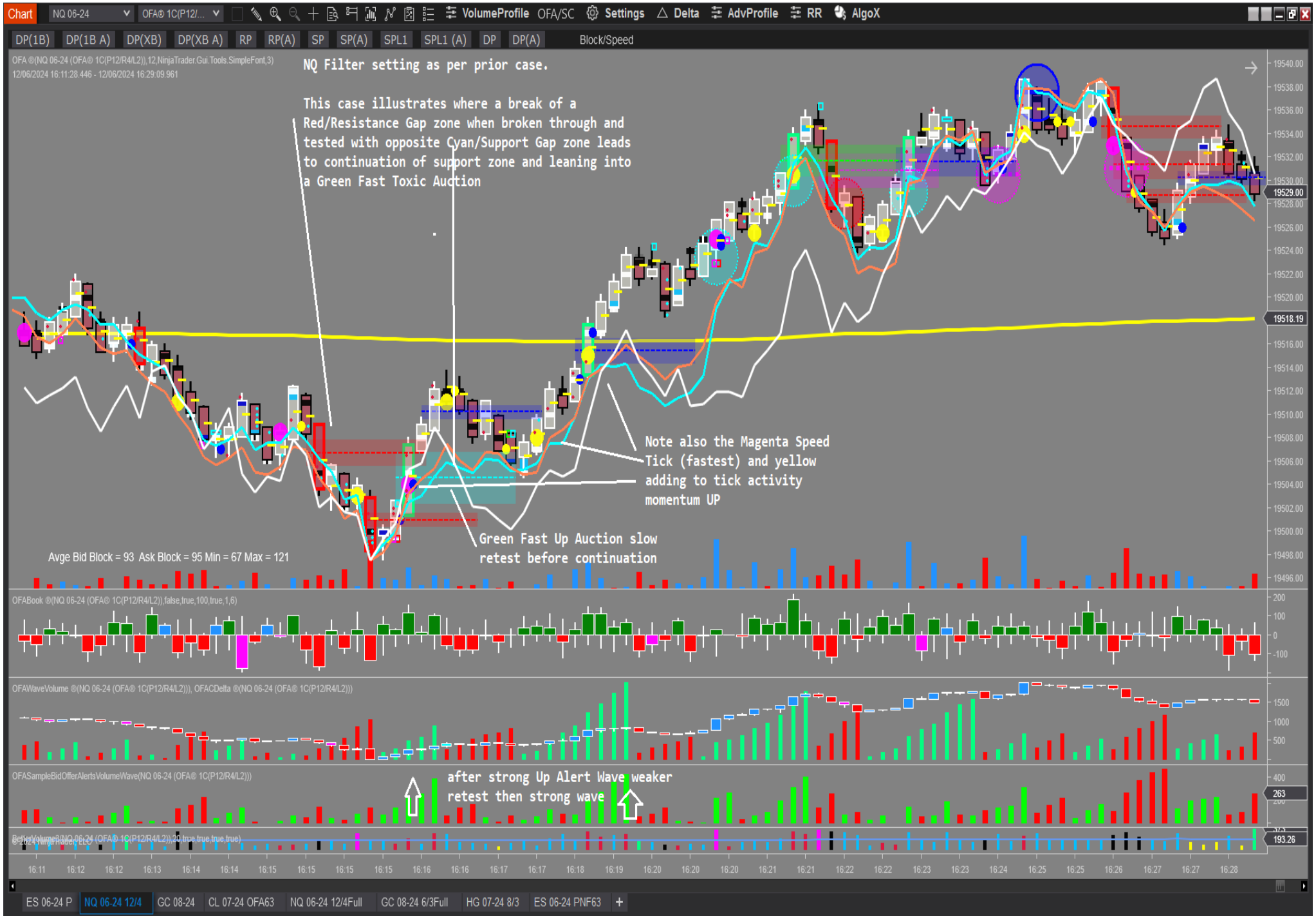
The next section contains 16 case studies, illustrating this Addon features with annotated charts. Some of the case studies also include elements from the other Addons released prior over the years.

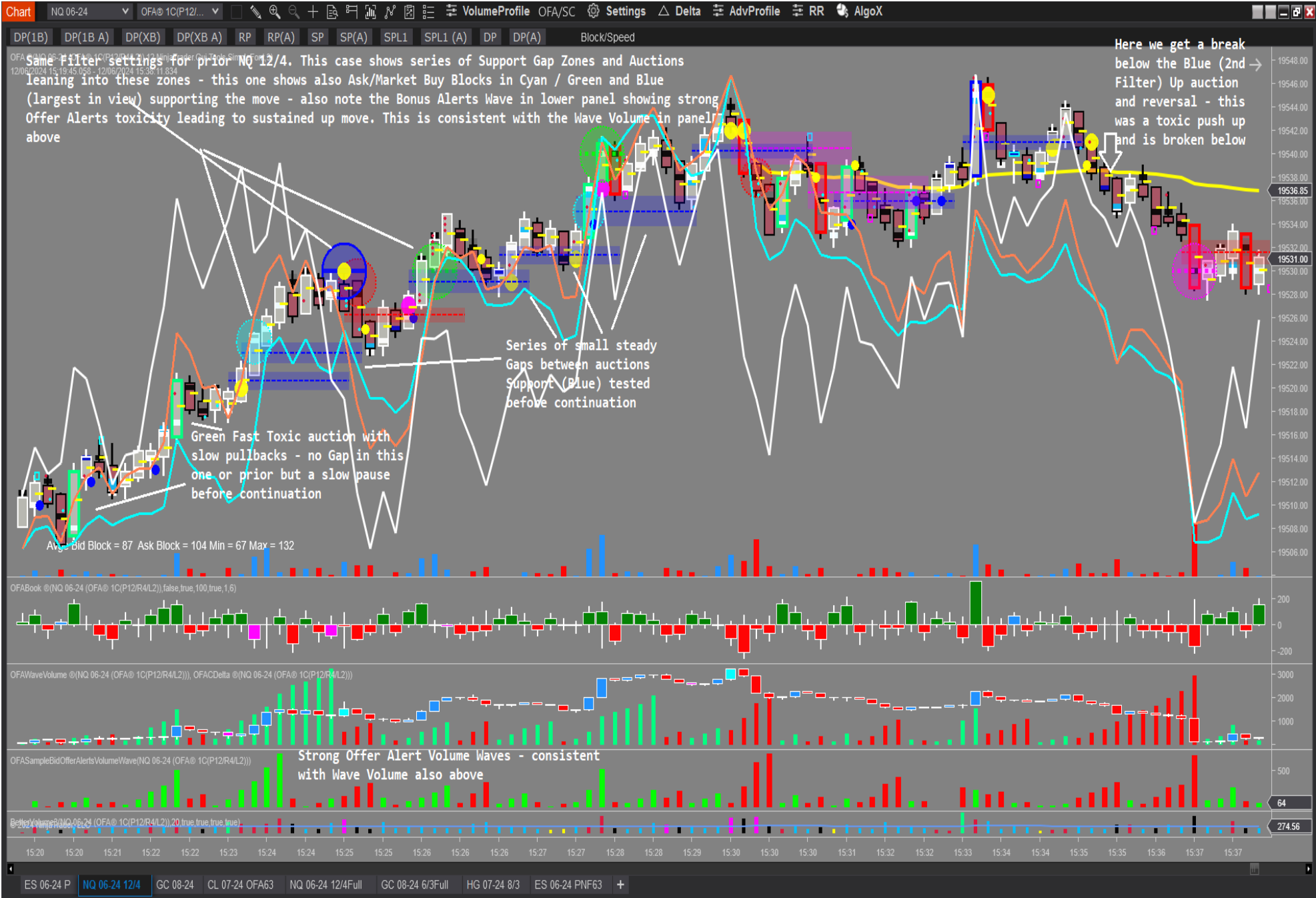
Prior to the Annotated Charts you will see a table of information relating to these Case Studies. This has been provided to facilitate learning and training of this Addon in addition to the video whereby you can load the contract data into Replay in NT8 and enable the settings that apply in each case. By interacting with the chart in NT8 and following the key points in the chart annotation it will hopefully enable a more interactive approach to these case studies. Please note for replay mode – there is a section in the last AlgoX lesson in the NT8 tutorials which covers some tips on using Replay mode in NT8. It is recommended to load one chart at a time and ensuring you have the data loaded for the days you are interested in. Some of the earlier bugs/issues in Replay have been resolved over the last few years thereby hopefully will make this a smoother process.

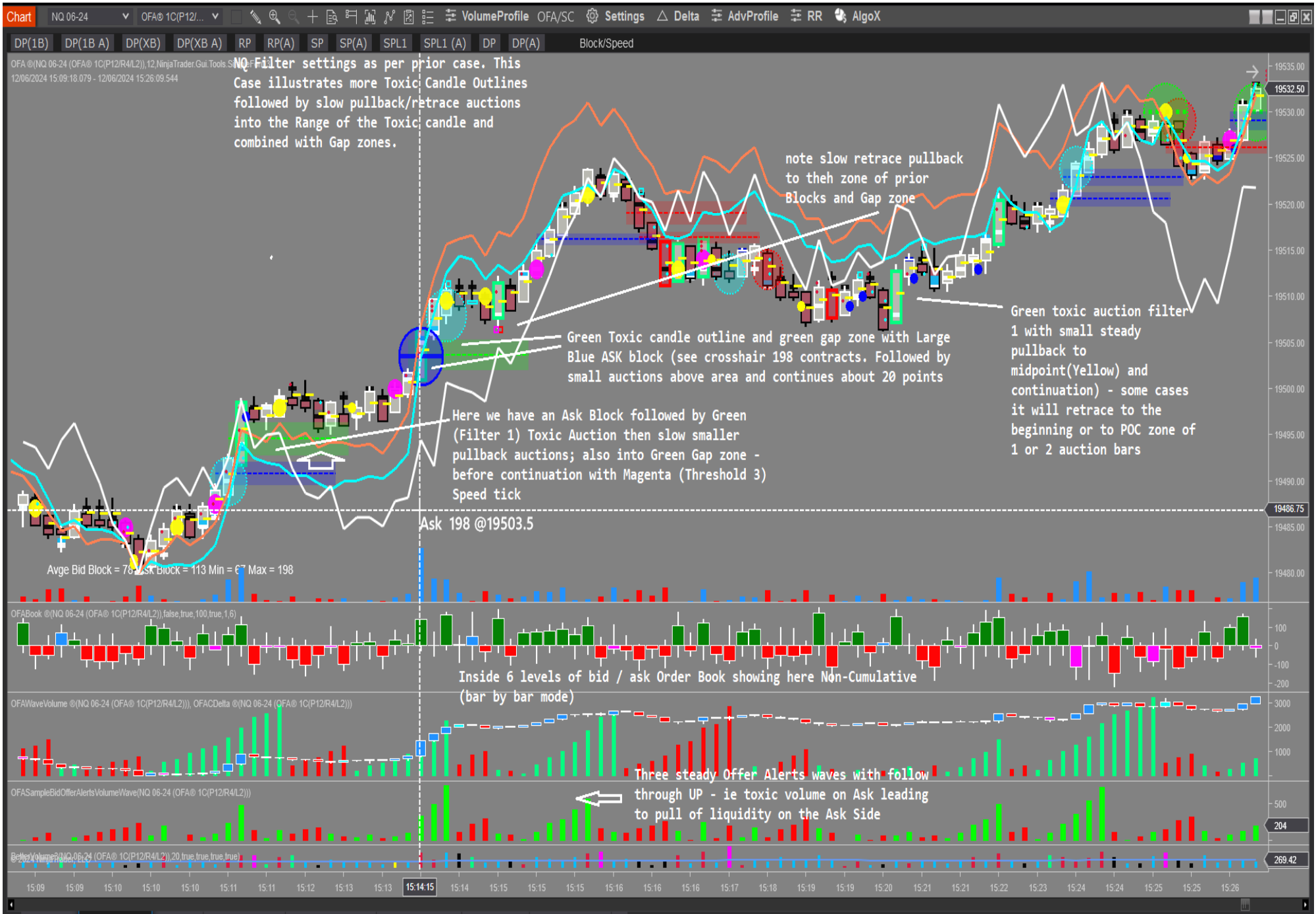
The table reflects the charts in order of appearance in the document following the table. The date and the time note is GMT – for EST time please subtract 5 hours; this refers to the leftmost bars in the chart view. For other times zones eg central / pacific or asia time zones please adjust accordingly.

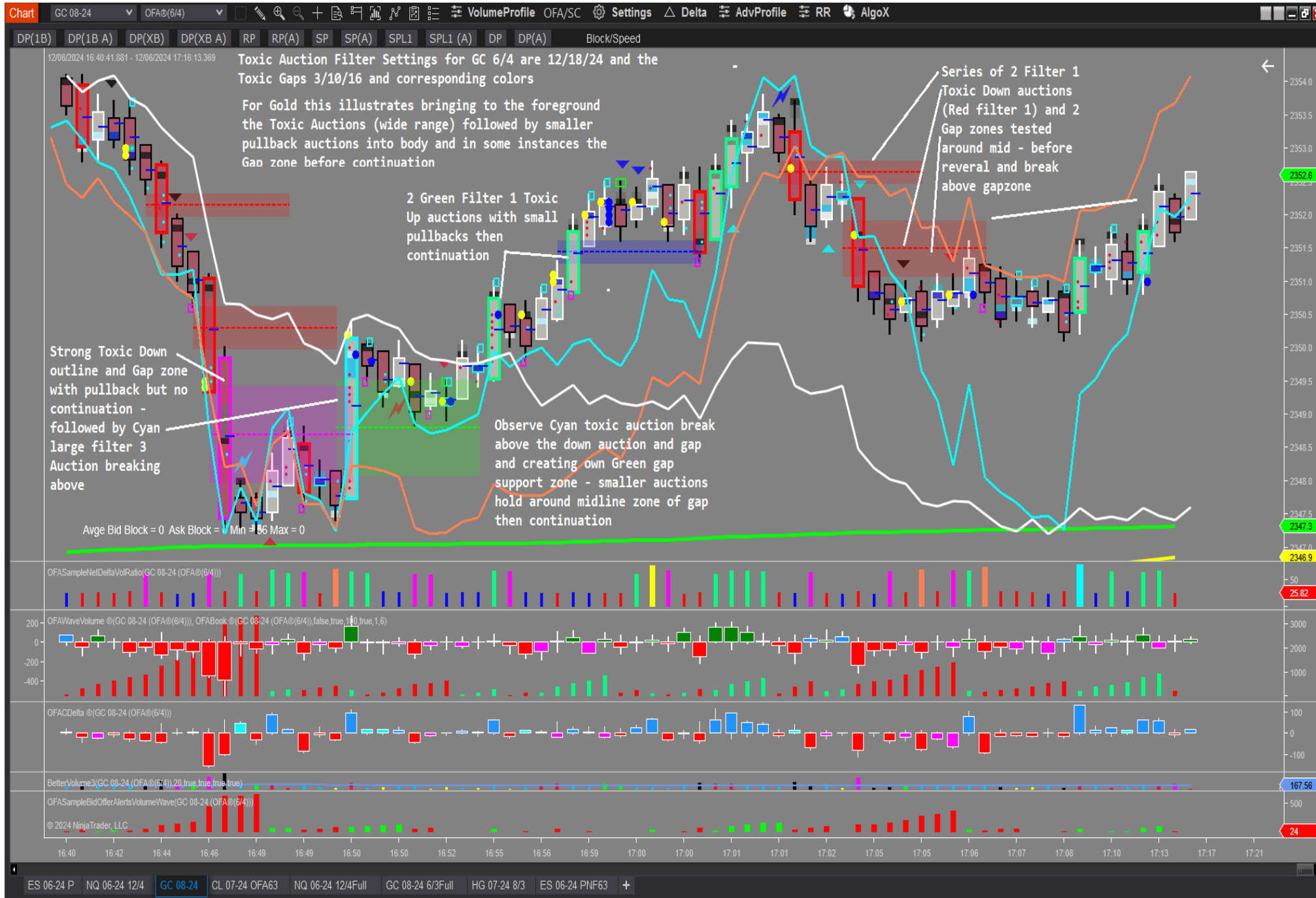
Date	Contract/Expiry	OFA Bar Settings	Time (GMT – for EST subtract 5)
12 th June 2024	nq 06-24	ofa 12/4	16:50:00
12 th June 2024	nq 06-24	ofa 12/4	16:15:00
12 th June 2024	nq 06-24	ofa 12/4	15:22:00
12 th June 2024	nq 06-24	ofa 12/4	15:10:00
12 th June 2024	gc 08-24	ofa 6/4	16:44:00
12 th June 2024	gc 08-24	ofa 6/4	16:30:00
12 th June 2024	gc 08-24	ofa 6/4	15:52:00
12 th June 2024	gc 08-24	ofa 6/4	15:03:00
12 th June 2024	es 06-24	ofa 6/3	13:36:00
12 th June 2024	es 06-24	ofa 6/3	14:40:00
11 th June 2024	es 06-24	ofa 6/3	18:33:00
19 th June 2024	cl 08-24	ofa 6/3	10:08:00
19 th June 2024	cl 08-24	ofa 6/3	13:55:00
18 th June 2024	cl 08-24	ofa 6/3	09:26:00
20 th June 2024	es 09-24	ofa 6/3 (Print Mode)	
20 th June 2024	es 09-24	ofa 6/3 (Print Mode)	

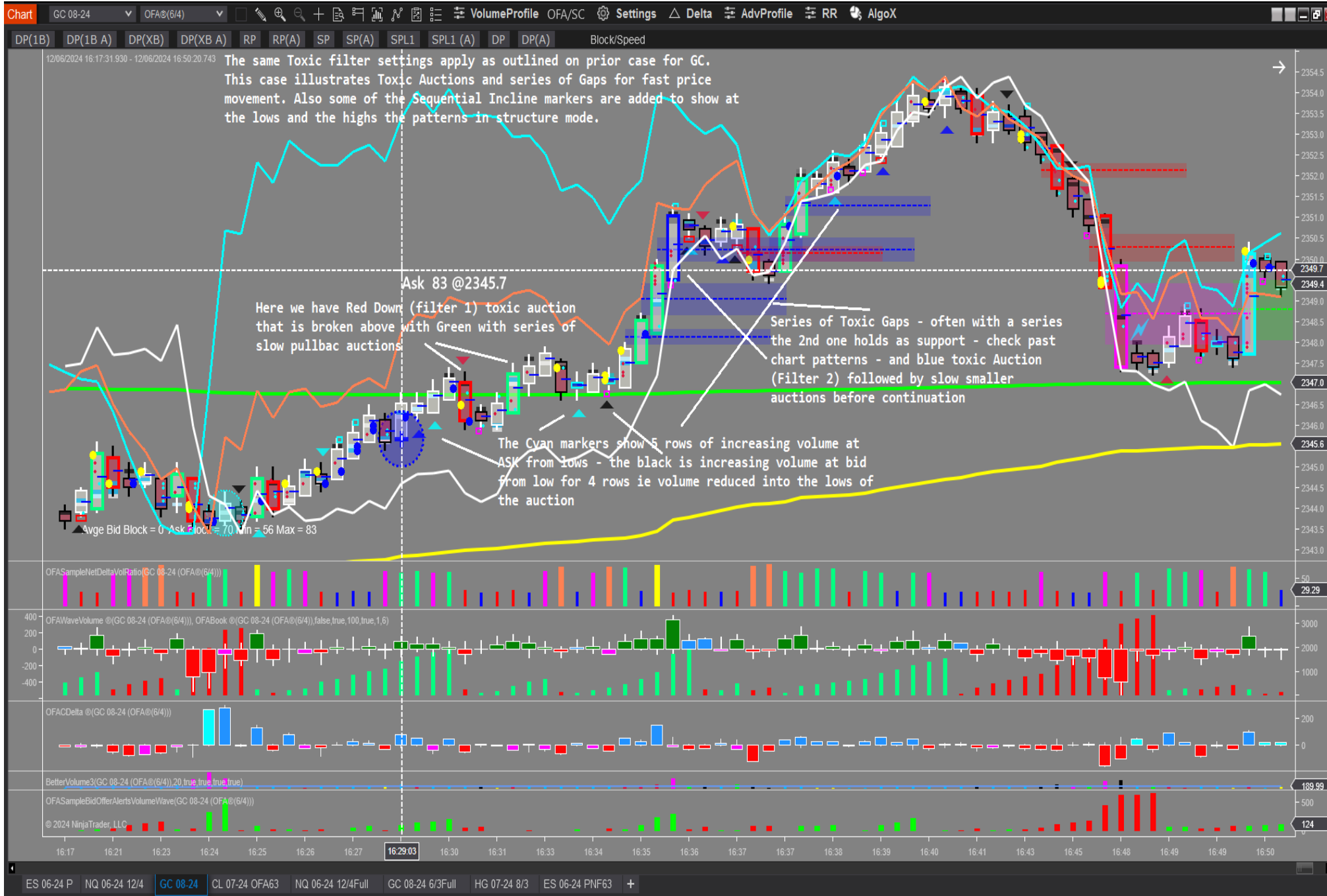


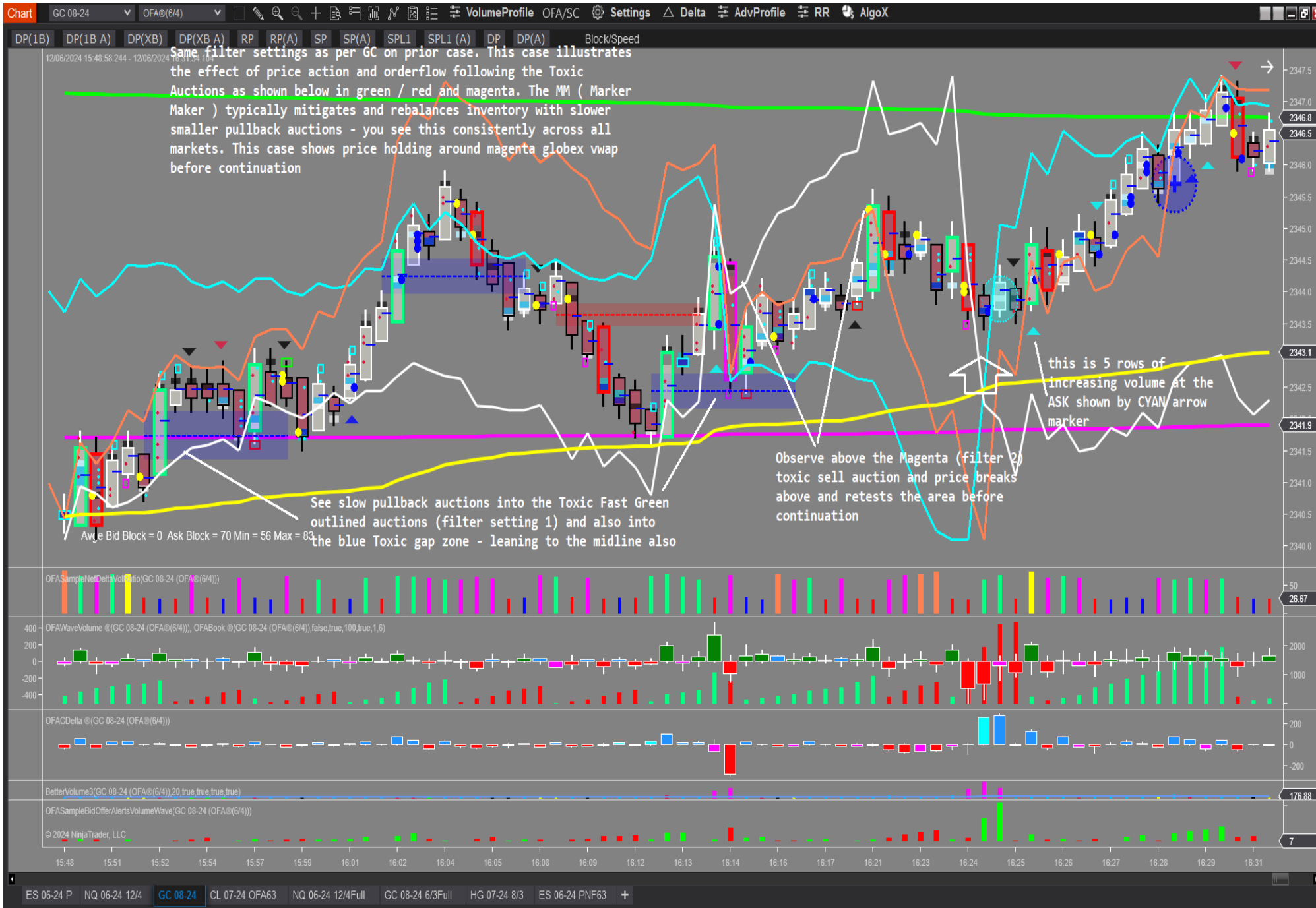


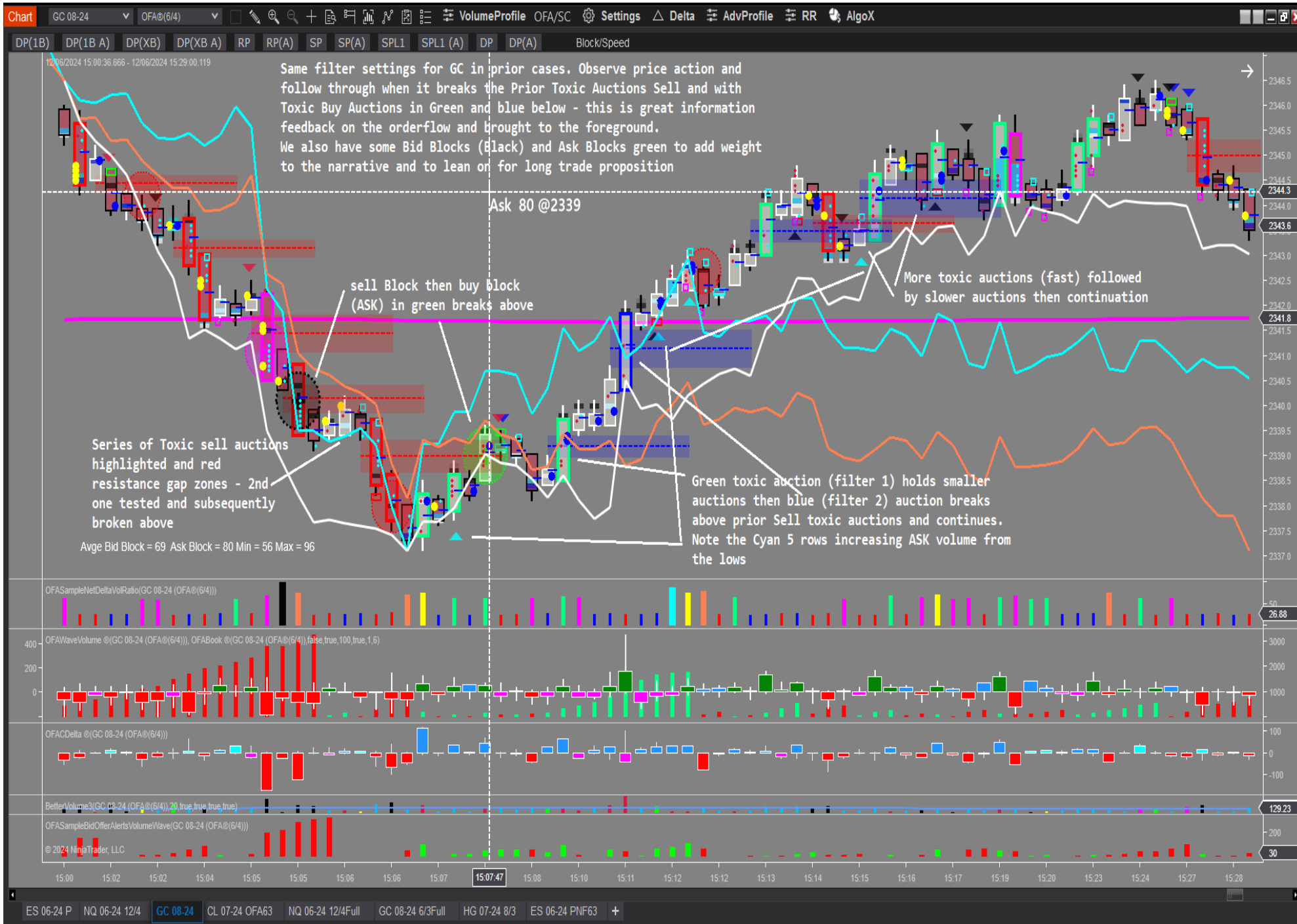










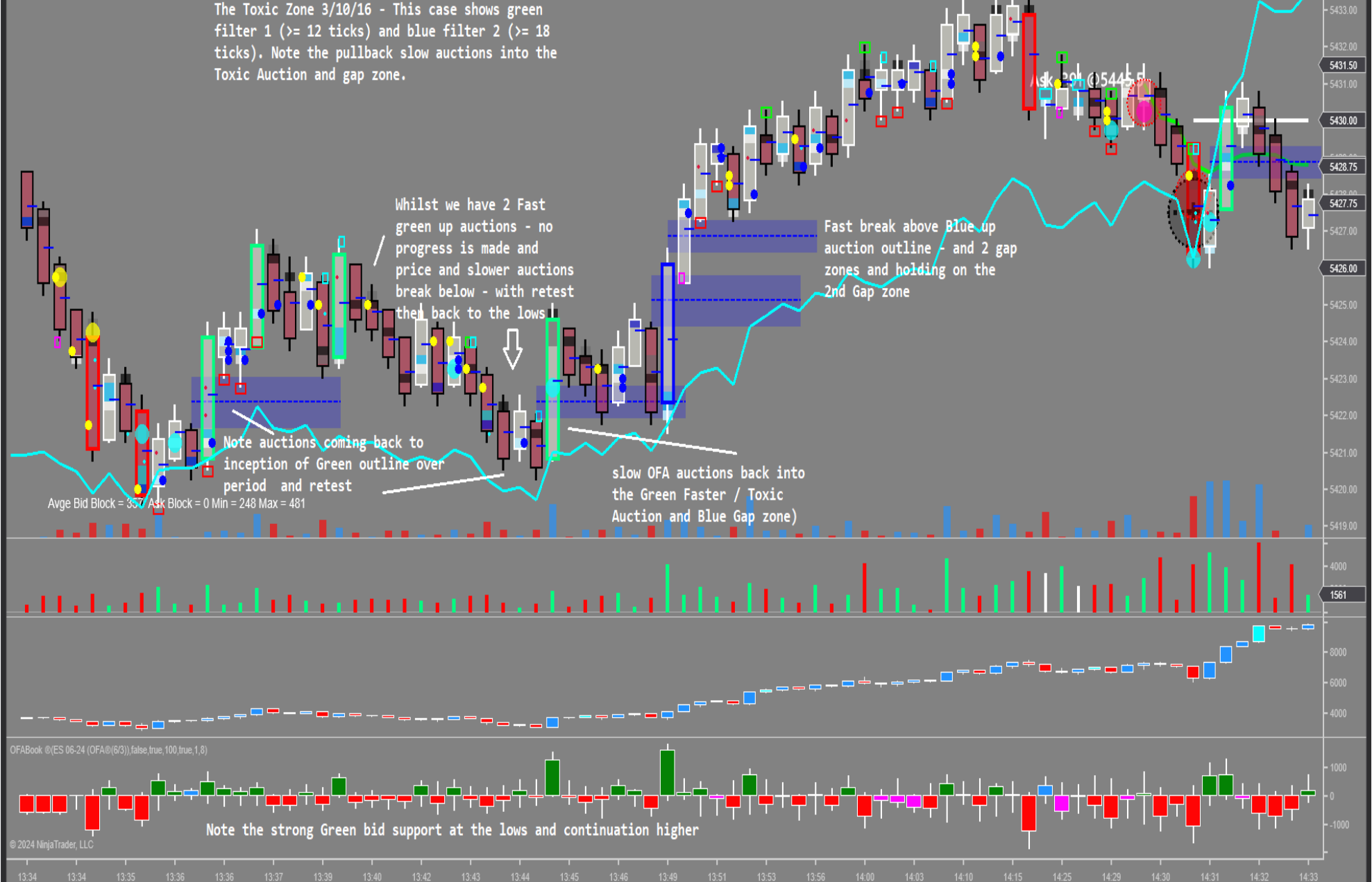


DP(1B) DP(1B A) DP(XB) DP(XB A) RP RP(A) SP SP(A) SPL1 SPL1 (A) DP DP(A) Block/Speed

GetHorizontalORTOpenClose(ES 06-24 (OFA@ (6/3)), 13, 14, 35, 12, 25, 3, 14, 30, 14, 30), OFACDelta @ (ES 06-24 (OFA@ (6/3)))

12/06/2024 13:34:13.996 - 12/06/2024 14:33:55.889

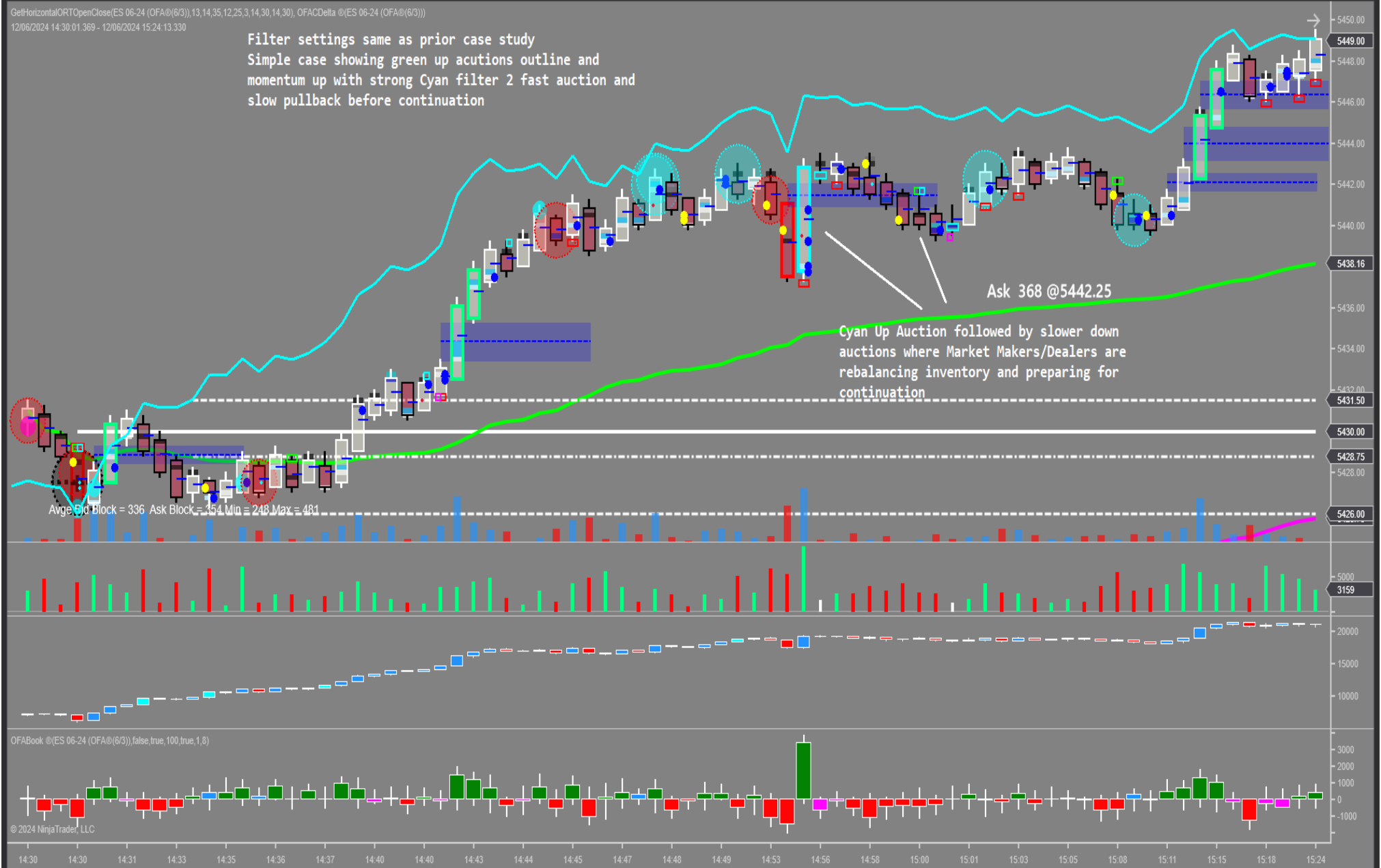
Filter settings for ES Auction outline 12/18/24
The Toxic Zone 3/10/16 - This case shows green filter 1 (≥ 12 ticks) and blue filter 2 (≥ 18 ticks). Note the pullback slow auctions into the Toxic Auction and gap zone.

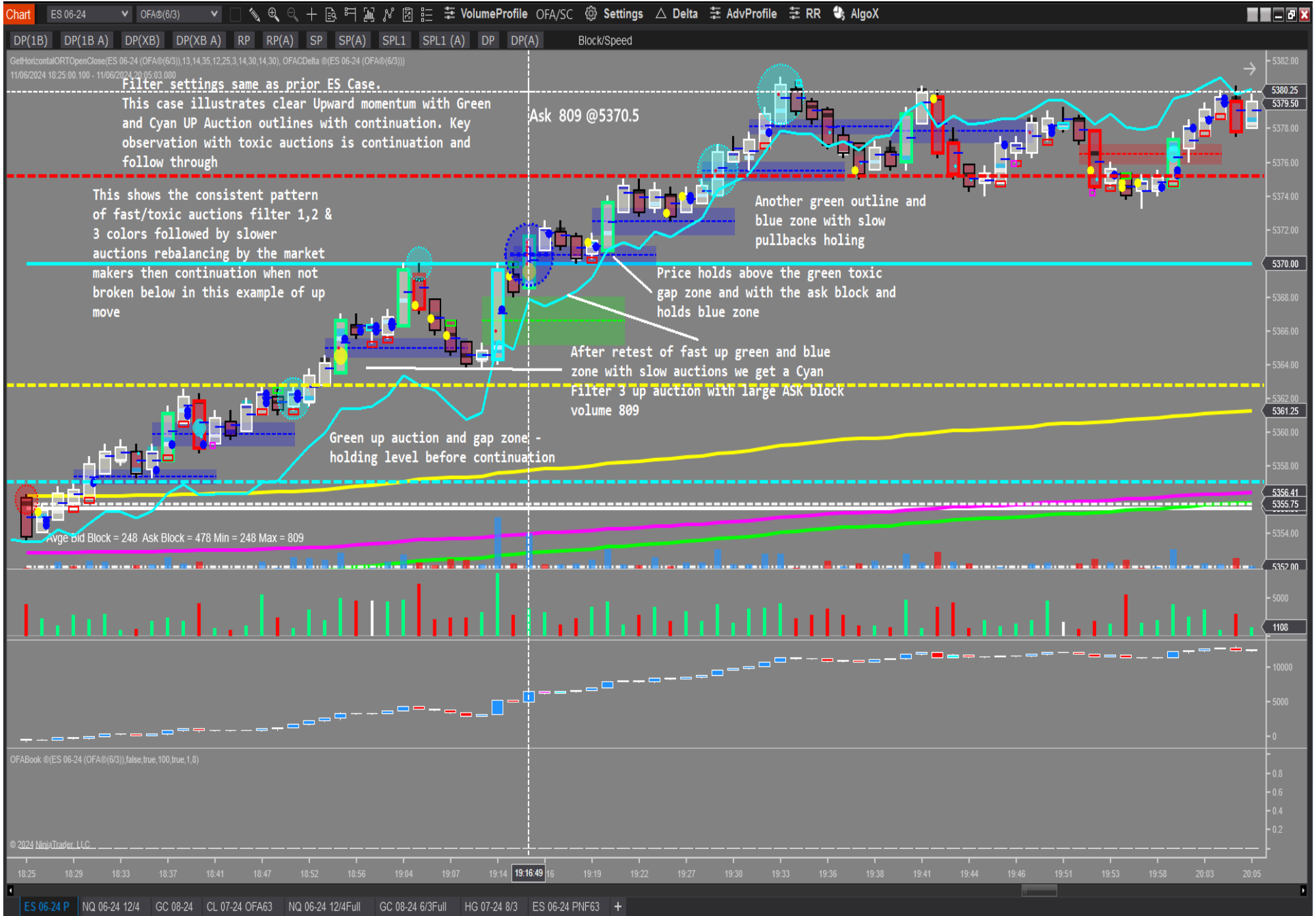


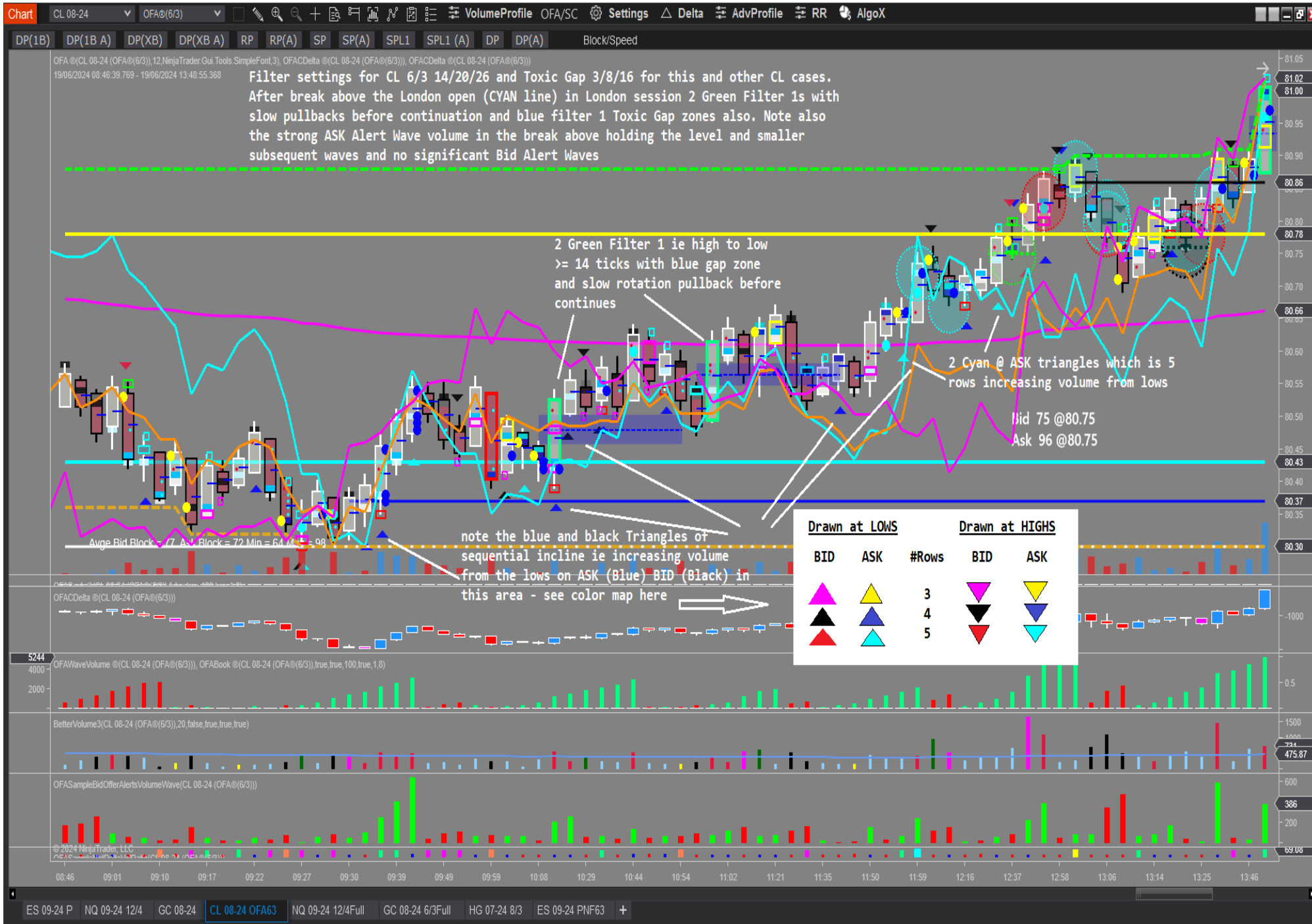
DP(1B) DP(1B A) DP(XB) DP(XB A) RP RP(A) SP SP(A) SPL1 SPL1 (A) DP DP(A) Block/Speed

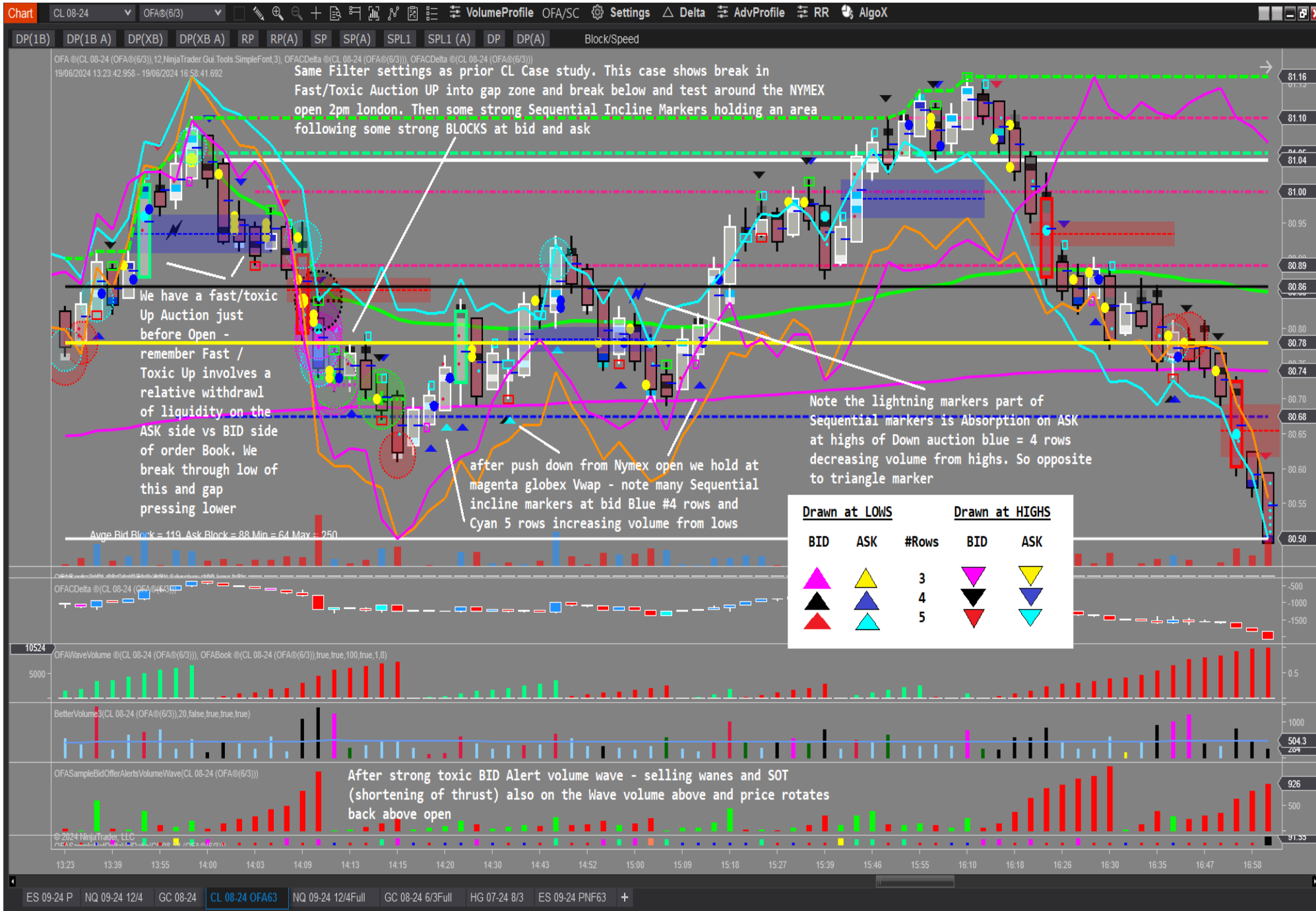
GetHorizontalORTOpenClose(ES 06-24 (OFA(6/3)),13,14,35,12,25,3,14,30,14,30), OFACDelta @ (ES 06-24 (OFA(6/3)))
12/06/2024 14:30:01.369 - 12/06/2024 15:24:13.330

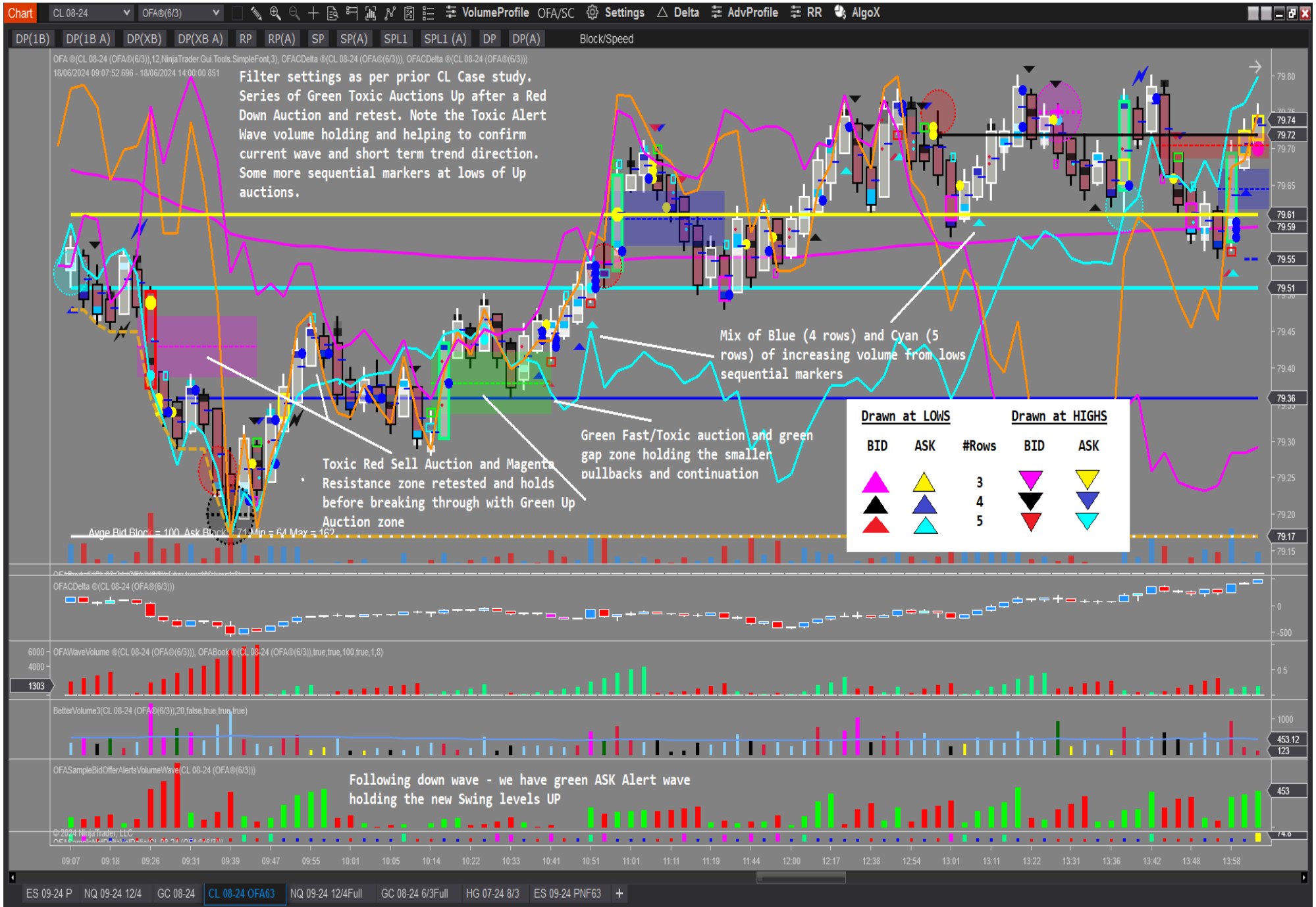
Filter settings same as prior case study
Simple case showing green up auctions outline and
momentum up with strong Cyan filter 2 fast auction and
slow pullback before continuation

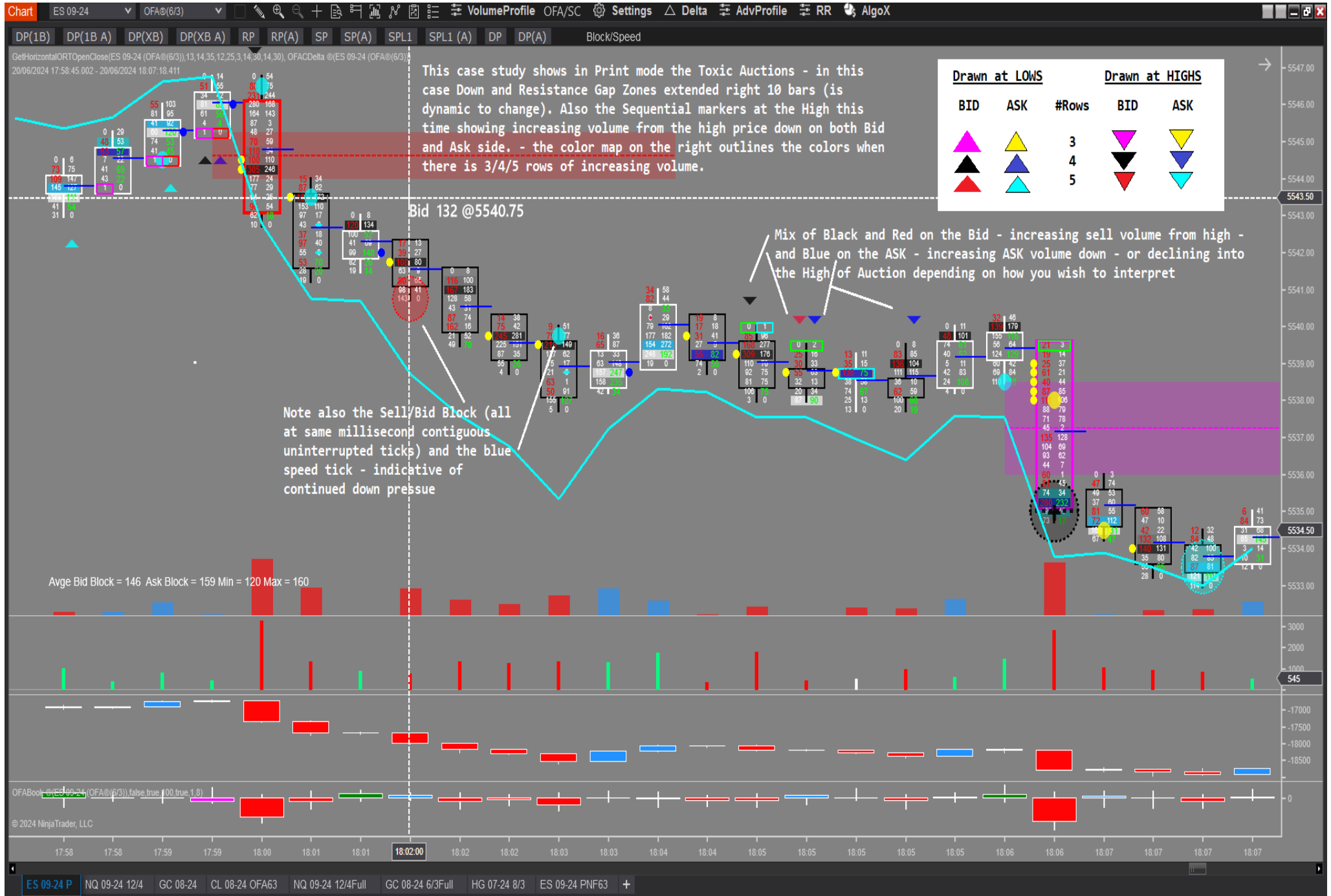












DP(1B) DP(1B A) DP(XB) DP(XB A) RP RP(A) SP SP(A) SPL1 SPL1 (A) DP DP(A) Block/Speed

GetHorizontalORTOpenClose(ES 09-24 (OFA@ (6/3)), 13, 14, 35, 12, 25, 3, 14, 30, 14, 30), OFACDelta @ (ES 09-24 (OFA@ (6/3)))
20/06/2024 16:09:23.324 - 20/06/2024 18:20:15.185

Same Filter settings as prior ES case study. This case we have 2 Green Filter Toxic Up auctions and 2 blue Toxic Gaps - the 2nd one holds and with Sequential markers at the lows showing increasing bid/ask volume from the lows up.

Cyan (5 rows) and Blue (4 rows) increasing ASK volume from the lows up. The RED is increasing BID volume from the lows up

Drawn at LOWS

BID ASK #Rows



Drawn at HIGHS

BID ASK



Top Bid Block = 0 Ask Block = 0 Min = 248 Max = 0

OFABook @ (ES 09-24 (OFA@ (6/3)), false, (100, 100, 100, 100))

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FAQ Section

How do I install this Addon?

This Addon is enabled as part of the Core OFA and will show in the 3rd Sub Menu from the top in the VolumeProfile Main OFA Menu. So there is **nothing** to install and no zip file to import

How do I get the 2 Bonus Alert Volume indicators activated?

These two indicators will show in the Indicator drop down list in the same way that **OFACDelta** appears and is installed. We will be processing and updating the permissions and authorisations for these as the order for this Addon comes in. As this has not been launched separately at the time of launch, we will be adding these manually so please bear with and be patient on this process. These indicators are filtering and only including any volume that is assigned an Alert color on the Bid or Ask. So a net Bid or Ask Alert volume produces the Green or Red Color for the bar.

The Addons are called **OFAAlertsVolumeHistogram** (Bar by bar version of this indicator)
OFAAlertsVolWave (Wave volume version – this one is cumulative for sequence of Up auctions or down auctions)

Do I need Level 2 data subscription for any features of this Addon – NO level 2 data is not required

Why do I not see all the menu item features of this Addon after purchase?

You may need to download the latest OFA from the download page on the website

Bonus OFA Indicators Overview for the Launch

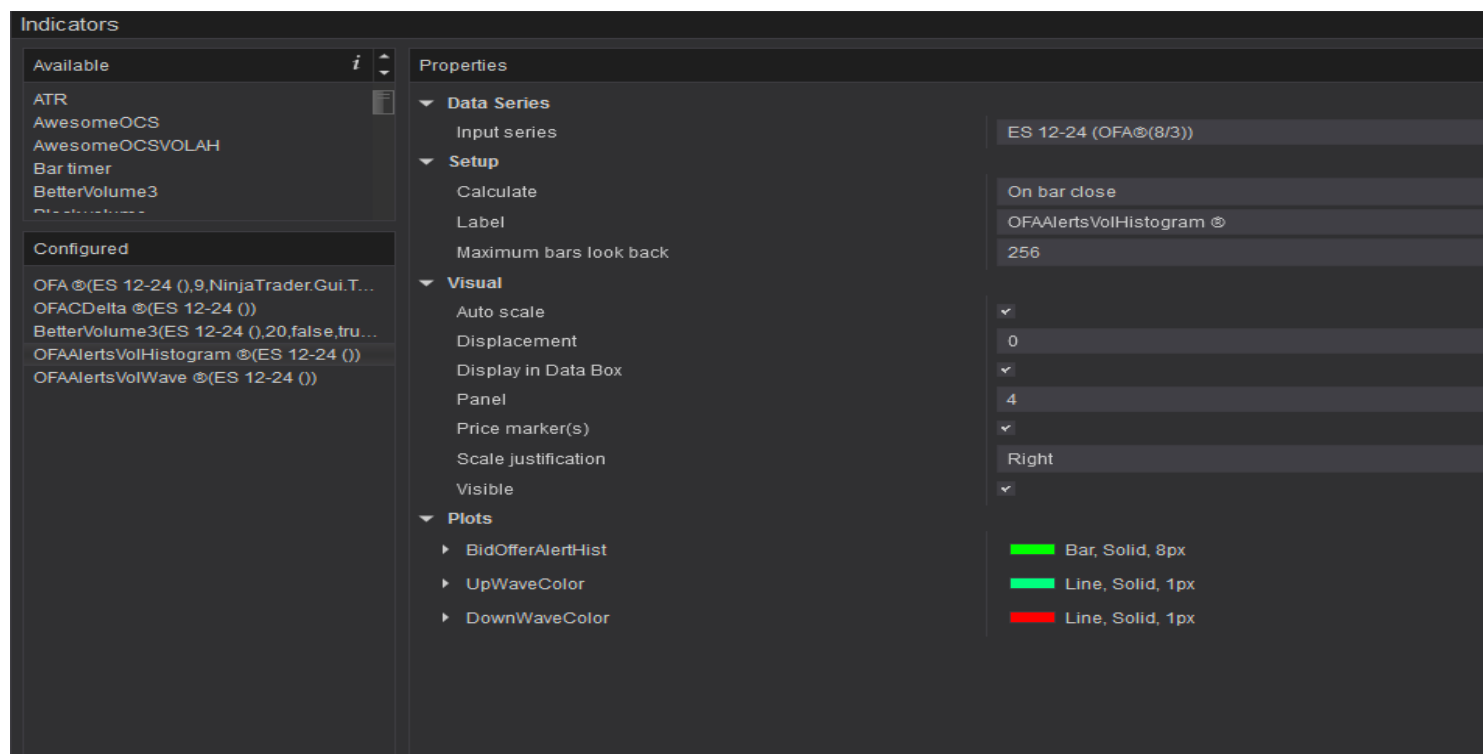
As part of the launch of the Toxic tools addon, will include 2 additional indicators :

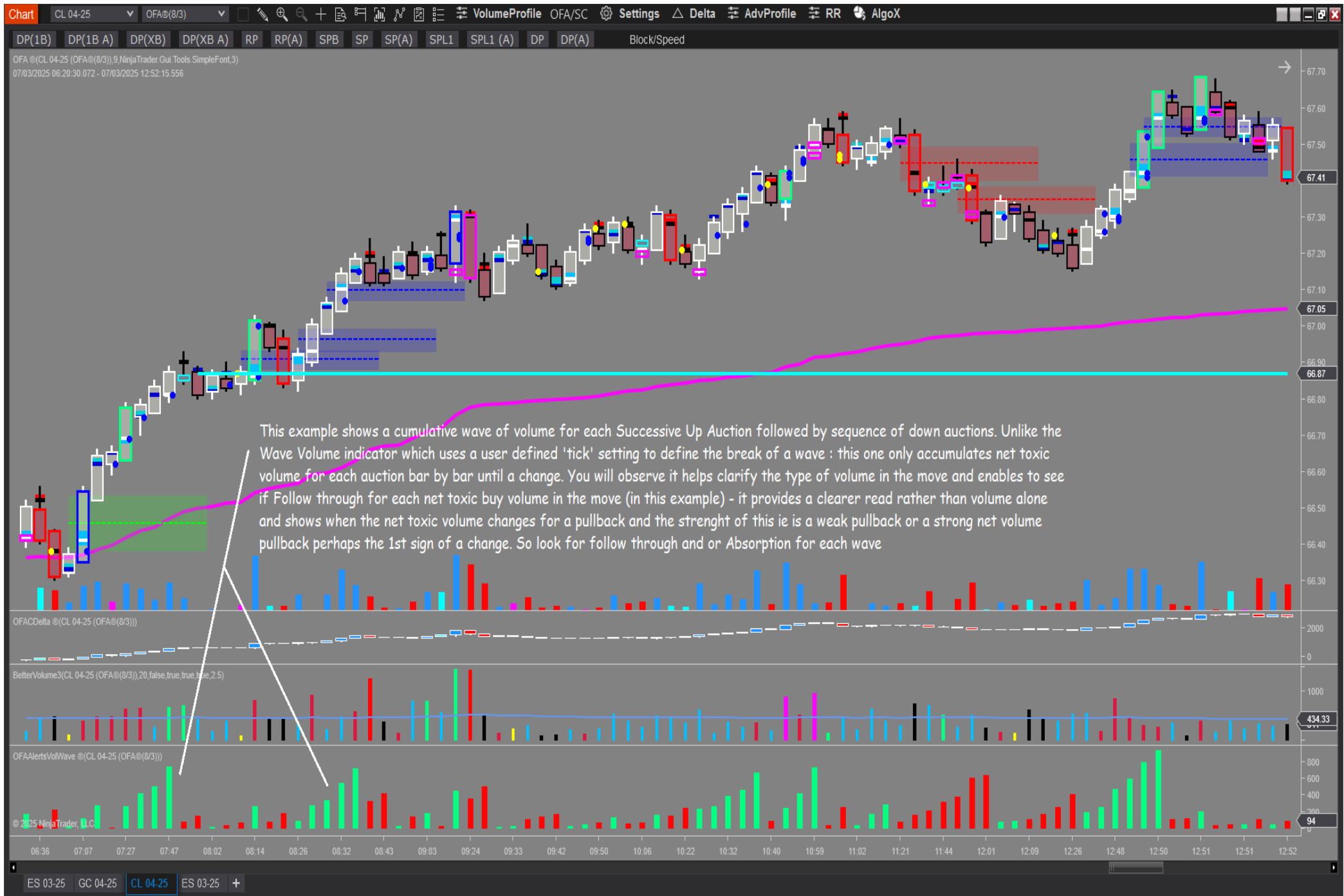
These both filter the Alerts Volume for each bar at bid and ask and shows the net Alert/Toxic volume per bar.

OFAAlertsVolHistogram : This version shows bar by bar the net Alert/Toxic volume.

OFAAlertsVolWave : This version shows cumulative for each contiguous sequence of up auction or down auction

Examples of this can be seen in the preceding Case studies with this showing and annotated in some charts in the lower panel. Also a separate screenshot example in the next page :





Appendix 1

What is Toxic Orderflow and how does it relate to the Bid/Offer Alerts and Sequence numbers and the dots i see on my OFA charts.

First of all please read the NT8 tutorials page in the training library. Go to lesson 3 ‘OFA Print Mode and Settings’ then read through lesson 4 ‘Toxic OrderFlow Settings’.

Here is some additional information and context with an example :

The order flow alerts in OFA show the print volume as a color when the order flow is toxic. This means that the market depth has changed drastically removing microstructure. So as an example... there might be 350 contracts in the market depth being offered. This would require 351 contracts being bought at market to clear the depth of that price. However, often we see the depth cleared with only a few contracts being bought – and then the price jumps up. This means the 350 contracts were pulled out of the offer – removing the resistance of that price. In this event you would see the volume in the OFA view change color. When there are several of these in a row (a sequence), you would also see a sequence alert (a dot) on the chart.

A toxic order flow sequence is a series of levels where the market blew through support or resistance created by market depth. So this is based on our internal algorithms – you can read more background papers on toxic orderflow but some can get quite complex.

Here is another example : Alerts are designed to identify toxic order flow conditions in the best bid and offer. As a very basic example, imagine there are 200 contract being offered at price 100. This means someone would need to buy 201 contracts to move the price higher. In reality there is not 1 person selling and 1 buying, so the numbers change. Someone might buy 10 of the 200, others might buy some also. Still more people might join the offer to sell more. Therefore, the offer size becomes “microstructure”, providing resistance for the price until the orders are matched. There is also microstructure support from the bids below. HFT algos are designed to “play” with this microstructure by adding to the market depth or feeding off it. When orders are removed from the depth – suddenly the structure breaks down. If there are 200 being offered and then suddenly only 5 are being offered – and 195 were not bought – you have a toxic order flow (again simplified). The resistance is gone and a small order can move the market. This is what the alerts are for. We are monitoring the times when the order flow has become toxic and therefore might fail to provide the microstructure that normalizes market movement. **In short, an alert means the market has an easy path to move up or down quickly.**

With that said we must emphasise that the Sequence dots should not be used in isolation as trade signals/triggers – but in context.

Appendix II

The **Market Maker Model** in trading revolves around liquidity provision by institutions or firms that continuously quote buy (bid) and sell (ask) prices in financial markets. Their primary role is to **facilitate smooth trading** by ensuring there is always a counterparty available for traders looking to buy or sell assets.

Key Aspects of the Market Maker Model:

1. Two-Way Order Book Participation

- Market makers simultaneously place **bid orders (buy prices)** and **ask orders (sell prices)** at different levels in the order book.
- This creates liquidity, allowing traders to execute transactions without major price disruptions.

2. Bid-Ask Spread Profitability

- Market makers **profit from the spread** (difference between the bid and ask prices).
- Example: If a market maker bids **\$100** for a stock and offers to sell at **\$100.10**, they capture a **\$0.10 spread** on each round-trip trade.

3. Delta-Neutral Hedging

- Unlike speculators, market makers typically **avoid directional risk**.
- They constantly **rebalance inventory** to stay "delta-neutral," meaning they do not take outright long or short positions but adjust positions dynamically based on market flow.

4. Liquidity and Inventory Management

- Market makers must manage their **inventory risk** by balancing their holdings through hedging or adjusting bid-ask spreads based on market conditions.
- If they accumulate too many shares on the bid side, they may lower bid prices or increase ask prices to encourage selling.

5. Withdrawing Liquidity (WOL) and Fake Liquidity

- Market makers sometimes **withdraw liquidity** (pulling bids or offers) to manipulate short-term supply and demand, leading to price fluctuations.
- This can cause "**toxic order flow**", where prices move quickly through low-liquidity zones.

6. Role in Price Discovery & Market Stability

- By consistently quoting prices, market makers help **establish fair value** for assets.
- Their activity **reduces spreads**, minimizes volatility, and provides depth in order books, making markets more efficient.

Market Maker Behavior in Different Market Conditions:

- **In Ranges** → Market makers thrive, as they profit from bid-ask spreads while keeping price contained within a bracket.
- **In Trends** → Market makers may adjust spreads, hedge positions, or step back from aggressive quoting to avoid inventory imbalances.
- **During News Events** → They often **pull orders (WOL)** to avoid being caught on the wrong side of extreme price movements.

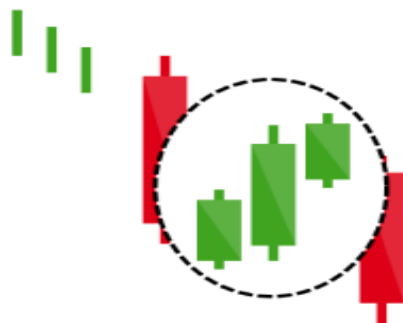
Conclusion

Market makers are essential to financial markets as **liquidity providers**, ensuring traders can enter and exit positions efficiently. While their goal is **not directional speculation**, their activity can influence price movements, particularly in areas of liquidity withdrawal and rebalancing. Understanding market maker behavior allows traders to anticipate price action, especially during **toxic order flow, liquidity gaps, and market reversals**.

Appendix 3 :

Falling three methods

This pattern helps predict the continuation of the current bearish trend. It is formed by a long red body, three small green bodies, and another red body where the green candlesticks are all formed within the range of the red bodies.



Rising three methods

The rising three methods pattern is the opposite of the falling three methods. It is formed by a long green body, three small red bodies, and another green body where the red candlesticks are all formed within the range of the red bodies. This pattern signifies that the bulls still have control of the market.

