Orderflows.com

# The Orderflows Bulge

**Michael Valtos**

Disclaimer

This manual is for educational and informational purposes only and should not be considered a solicitation to buy or sell a futures contract or make any other type of investment decision. Futures trading contains substantial risk and is not for every investor. An investor could potentially lose all or more than the initial investment. Risk capital is money that can be lost without jeopardizing one's financial security or lifestyle. Only risk capital should be used for trading and only those with sufficient risk capital should consider trading. Past performance is not necessarily indicative of future results.

CFTC Rules 4.41 - Hypothetical or Simulated performance results have certain limitations, unlike an actual performance record, simulated results do not represent actual trading. Also, since the trades have not been executed, the results may have under-or-over compensated for the impact, if any, of certain market factors, such as lack of liquidity. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any account will or is likely to achieve profit or losses similar to those shown.

Before you get started with the Orderflows Bulge, I just want to make sure you get everything set up properly. You have to download and import the indicator and enter your license token which were sent to you in a separate email.

You import the Orderflows Bulge as a regular NinjaScript Add On in your NinjaTrader Panel.



How to import the Orderflows Bulge
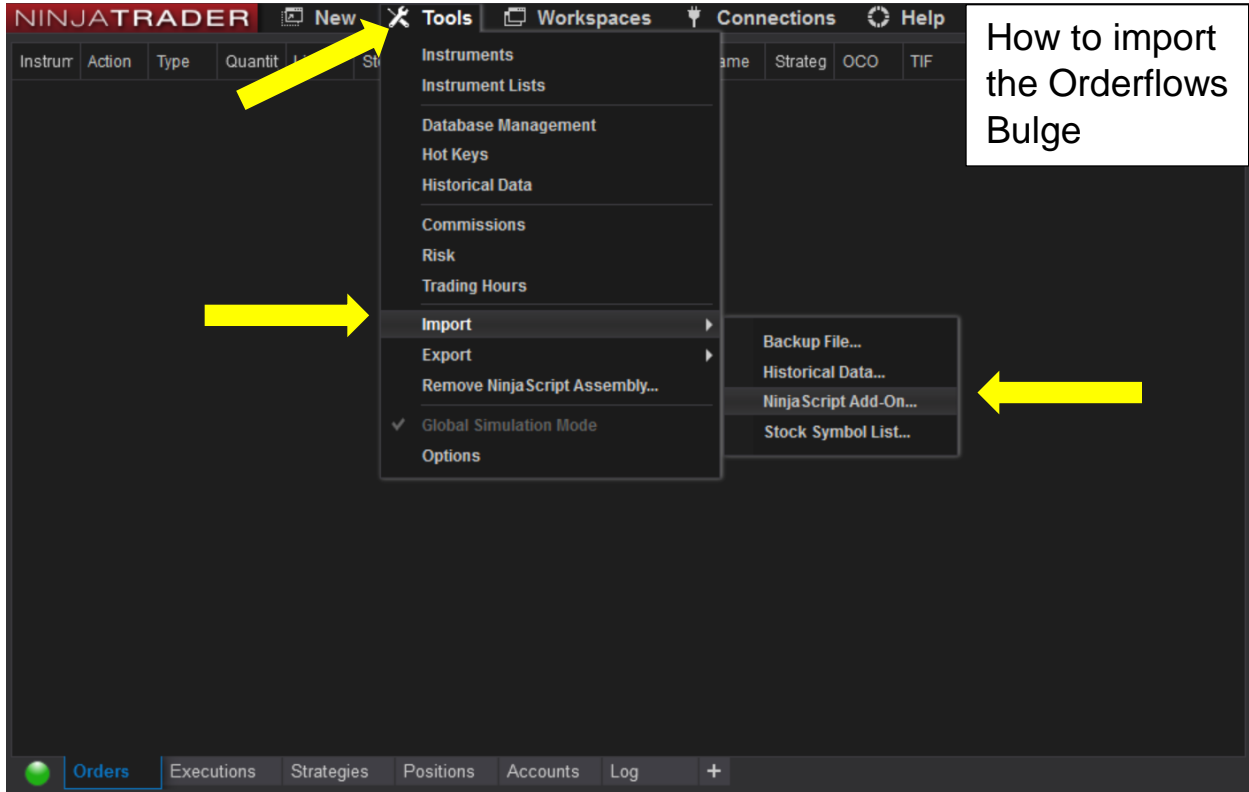
After importing the Orderflows Bulge, you have to load it onto a chart and enter your license token. You will have received your license token in a separate email. The email comes from licensr.cloud this is what it looks like:
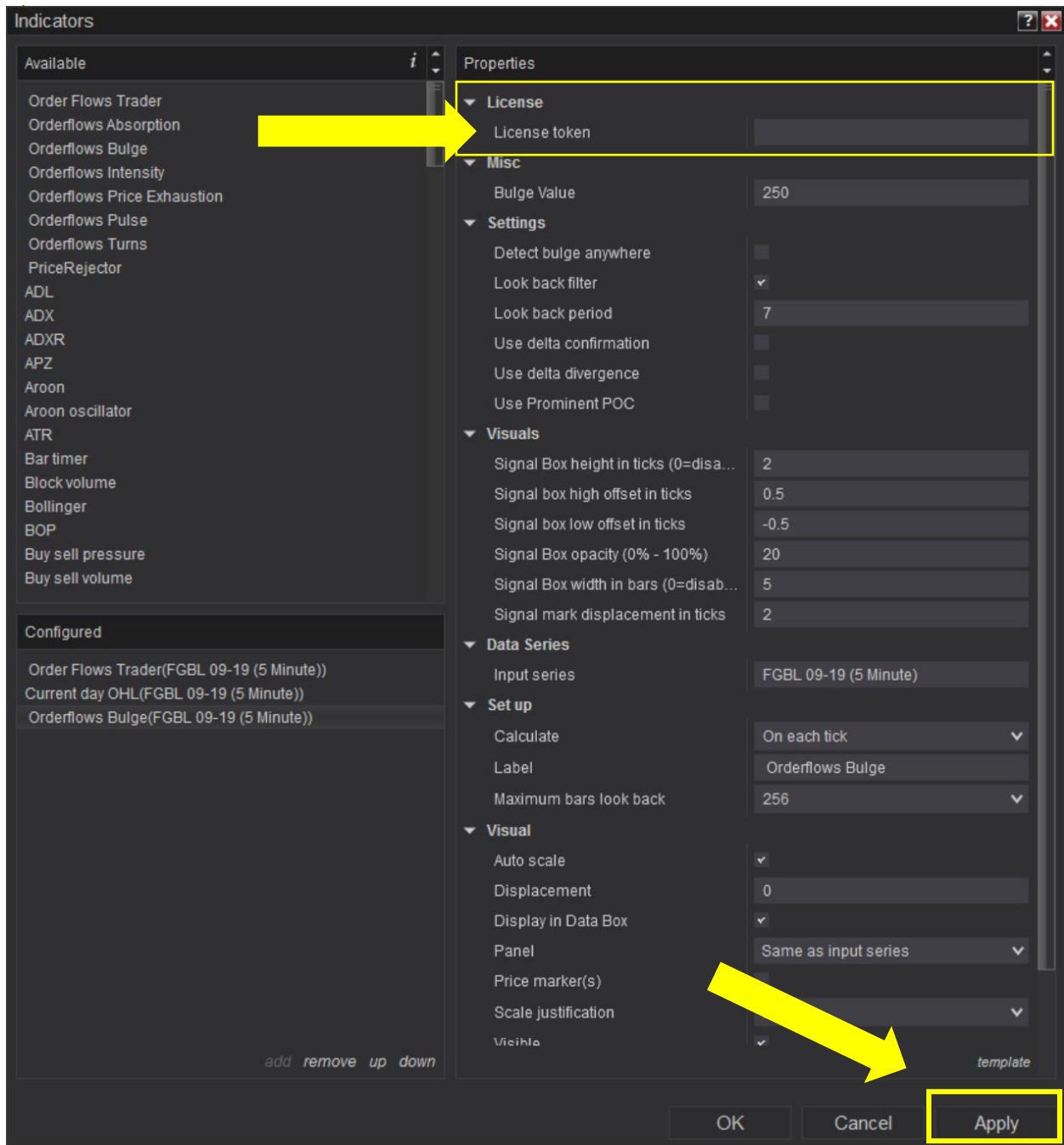
License created 3

info@licensr.cloud
To: mvaltos@yahoo.com

## License created

Customer: mvaltos@Yahoo.com
Products: OrderflowsBulge
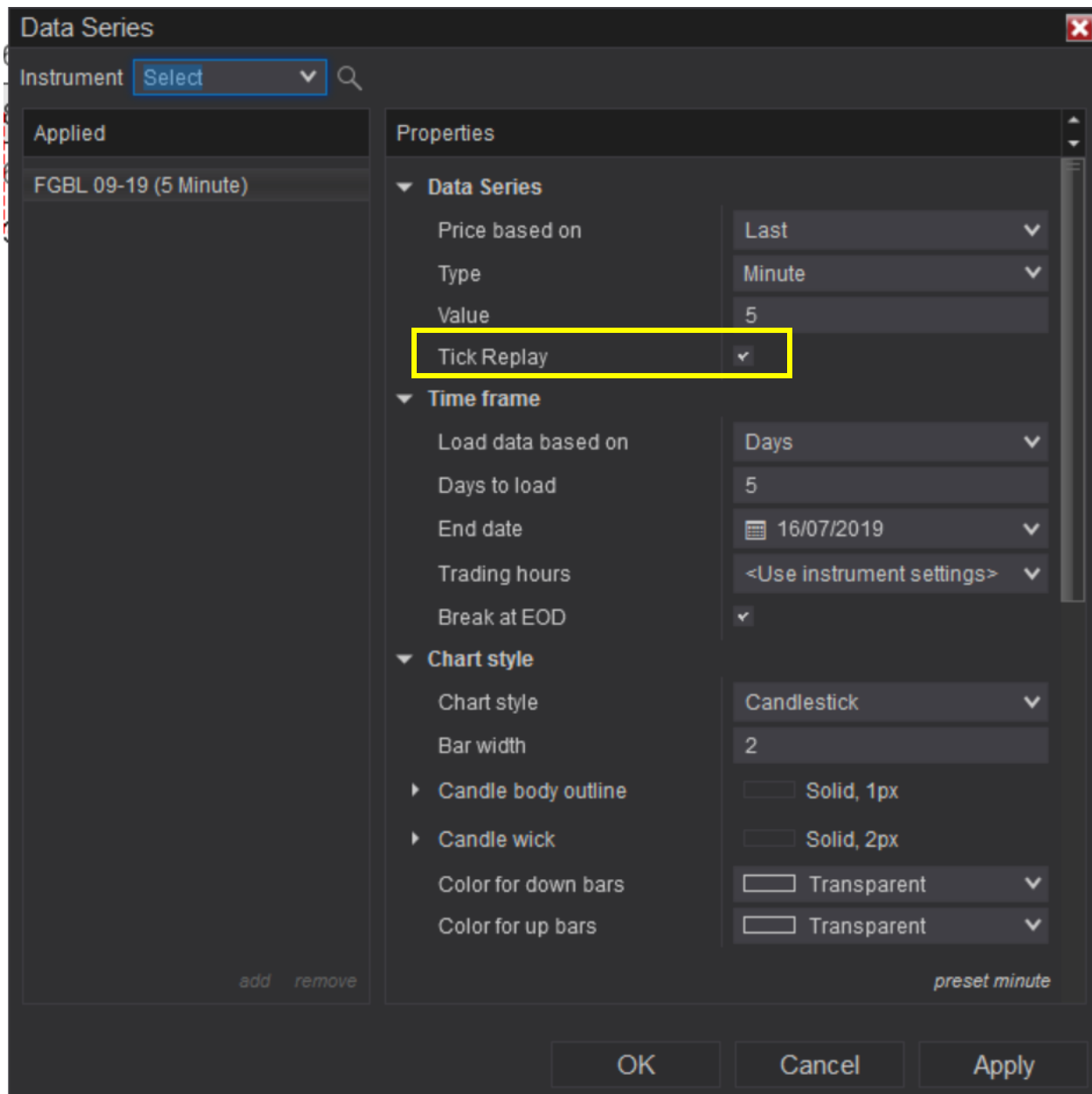License token: fdc686a78c76414eae4acabdd2

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Simply copy and paste that license token into the settings of the indicator.



If you don't enter your license token, then you will get a pop up saying your software is not licensed.

Please make sure you have enabled the tick replay function on your charts when you open them.

If you are new to NinjaTrader, you might not have that check box named "Tick Replay."

To enable you simply go to your NinjaTrader Control Panel and click on Tools → Options → Market Data → Properties put a check in the box for "Show Tick Replay". Then that choice will appear whenever you open a new chart in NinjaTrader.
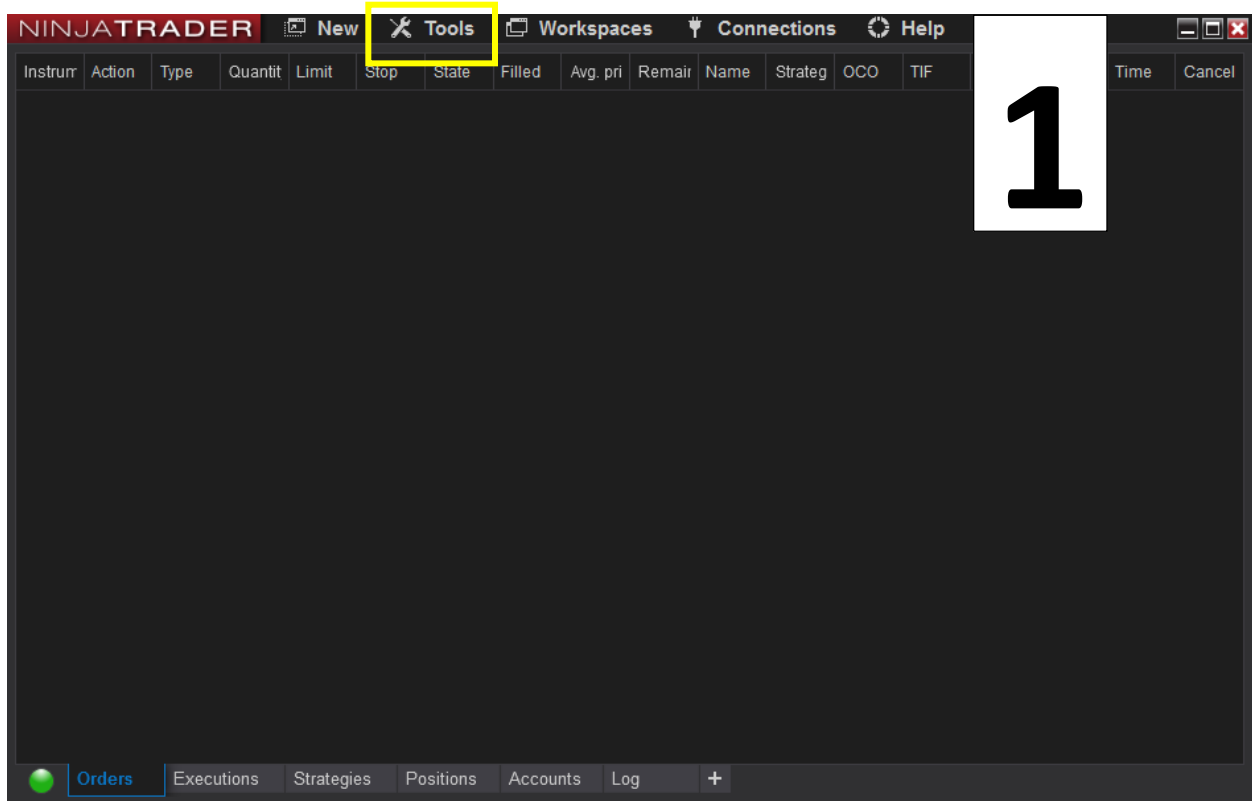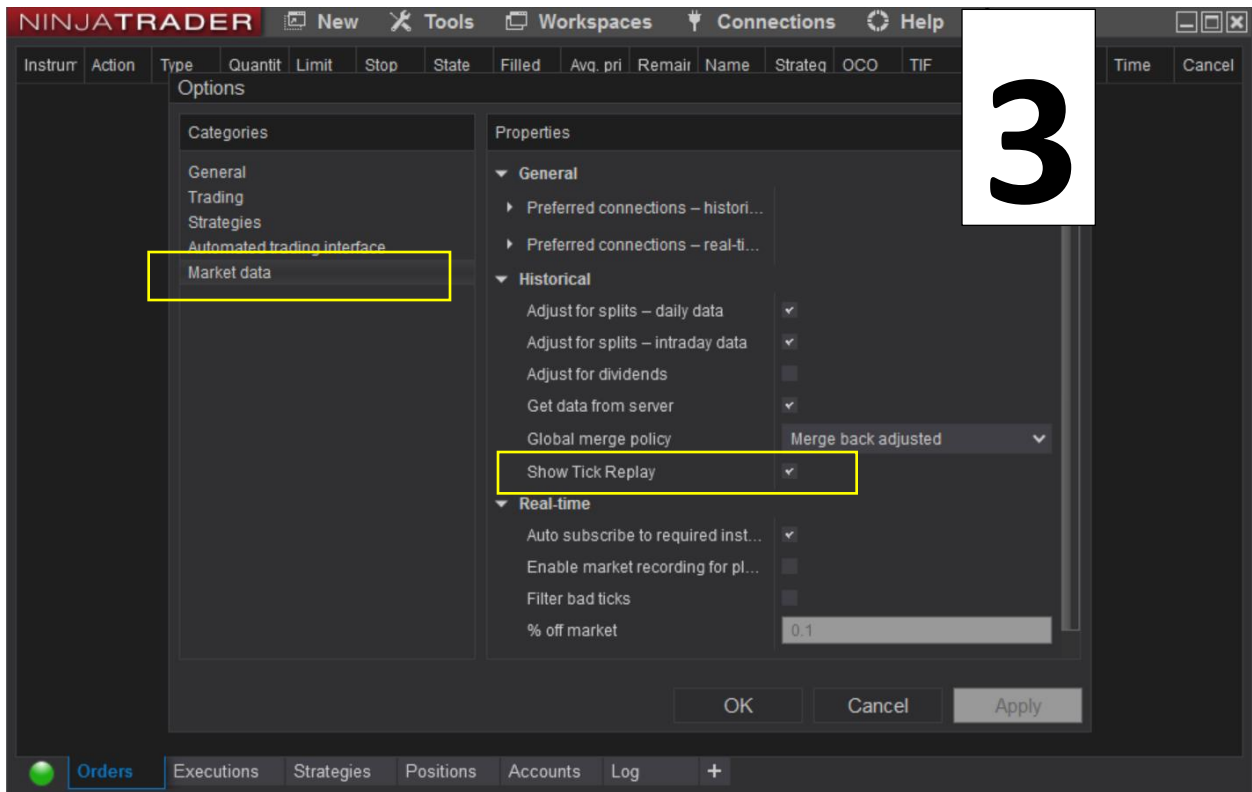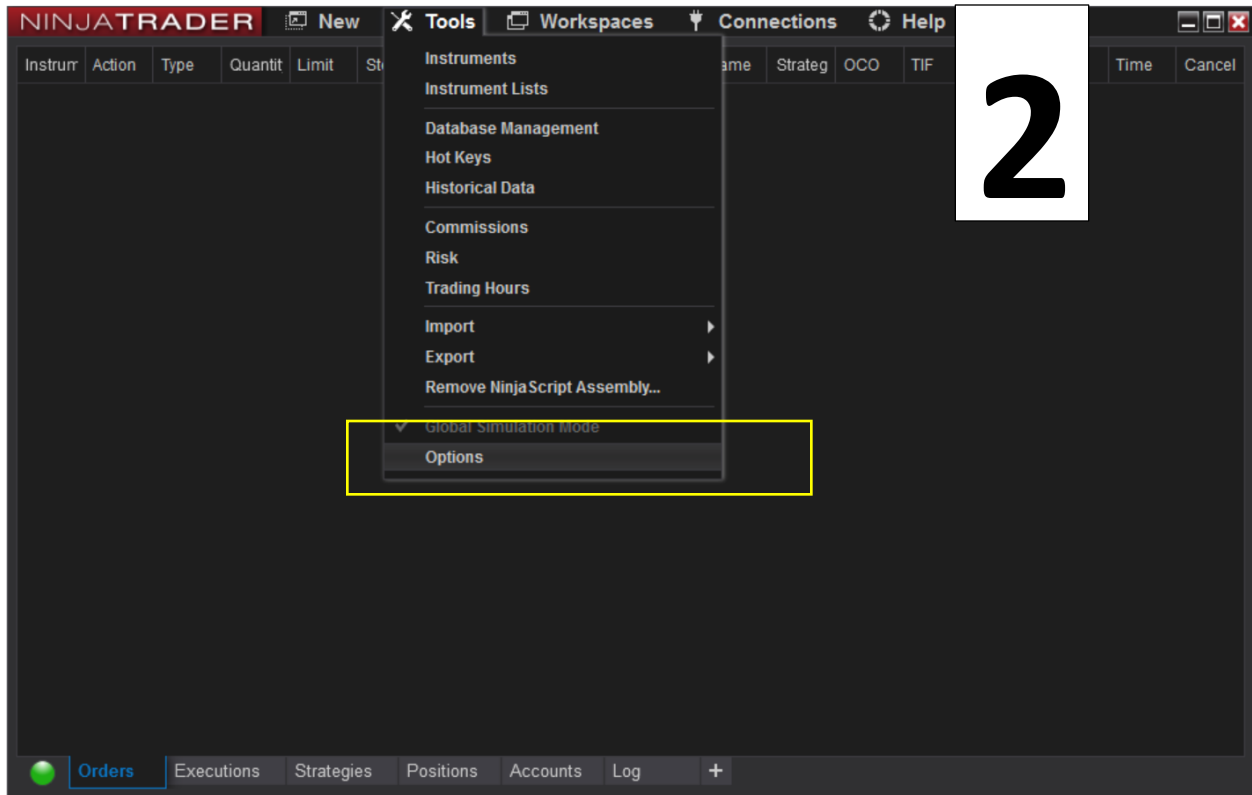
Please note the Orderflows Bulge will work on just about any chart type on NinjaTrader. It will work on a normal bar chart as well as a footprint chart, like my Orderflows Trader footprint chart.
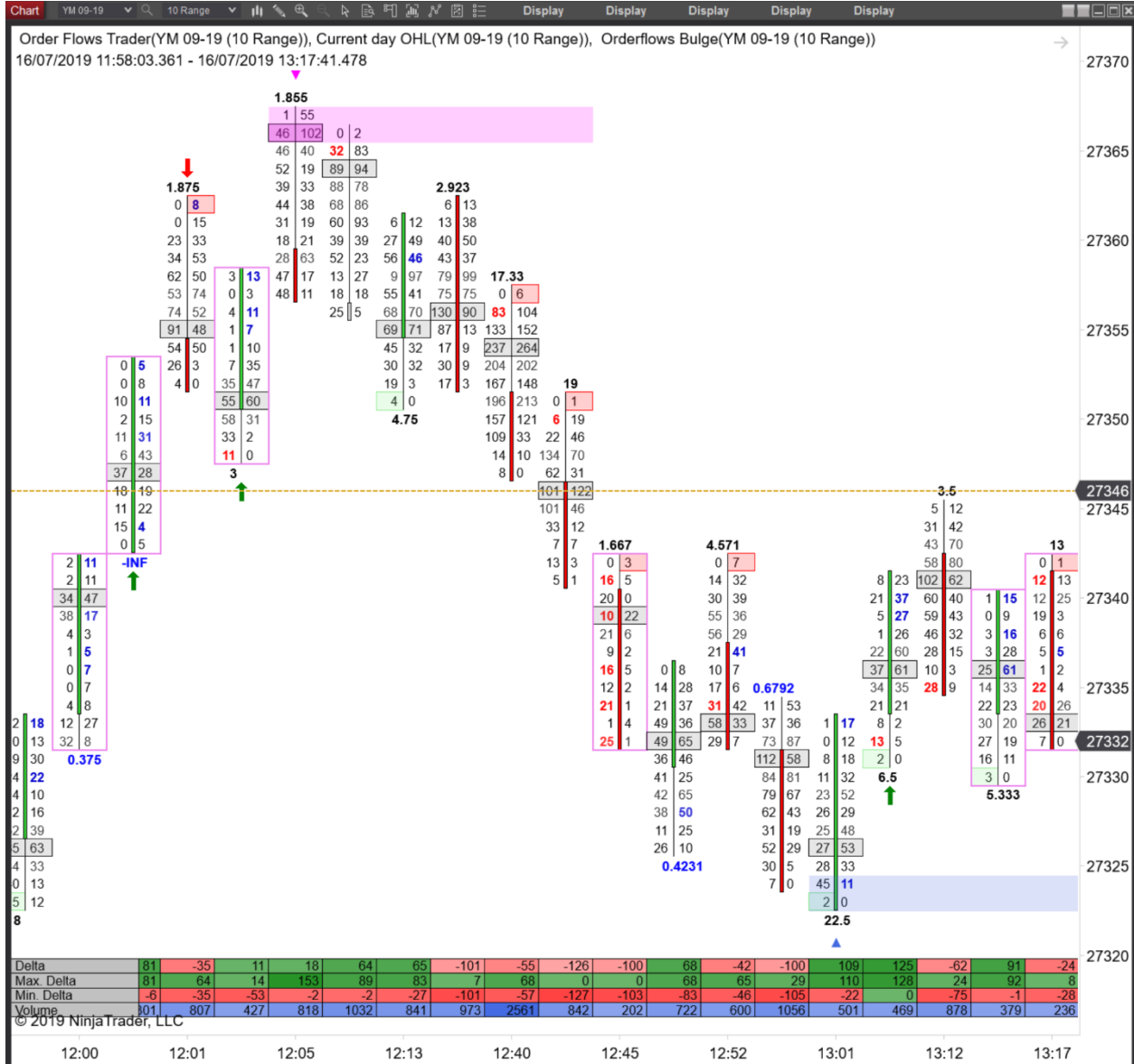
Now that we got the details out of the way, lets get on to how to actually use the Orderflows Bulge…

Welcome to the Orderflows Bulge indicator.

There are many ways a trader can use the information available from a footprint chart. Analysis paralysis is a real problem for a lot of traders. For many traders it is best to concentrate on a few things that are happening in the order flow rather than try to trade every single nuance that is occurring.

That is why I had the Orderflows Bulge indicator coded. I have written about and explained the Orderflows Bulge in the Delta Course as well as in some videos on YouTube and there was a lot of feedback from traders asking to have it "indicatorized."

What makes the Orderflows Bulge so unique is that it is a combination of absorption, stopping volume and near term support or resistance.

Some people like to think there is some secret to market success, but at the end of the day it is going to come down to buying low and selling higher or vice versa.

What trips up a lot of traders is trading in terms of price and not in terms of volume. Price by itself does not support the market, traders coming in and buying is what supports the market.

Ask yourself what causes resistance in the market? Resistance is causes by sellers entering the market to sell their supply.

A few sentences ago I said what trips up traders is trading in terms of price. They look at their 30-minute chart and think everyone in the world is looking at the exact same chart and deciding if something is cheap or expensive based on the price it is trading right now on that chart.

Each trader views the market in their own time frame. Some traders have a 5-minute time frame while others may have a 5-day time frame. What might look expensive on a 5-minute chart time frame trader, can look very cheap to a 5-day chart time frame trader.

Firstly, forget about thinking that every trader uses the same time frame chart. Secondly, start looking for the areas where the longer-term time frame trader is active in the market.

Generally speaking, a longer-term time frame trader is one who has a macro view of the market, not a 5-minute view, not a 30-minute view not a 4-hour view. They think in broad sweeping terms of the market, long time frames: 6 months, 1 year, 2 years and sometimes longer.

Longer term time frame traders trade in the fundamentals not just of the market with the position, but also the markets affecting that market too. For example, they just don't trade crude oil, they also trade the shipping costs, interest rates, and currencies involved.

The problem that the longer-term time frame trader face though is size. They trade much bigger size than the ordinary trader.

Small retail traders like you and me can capitalize on their activities by seeing it in the order flow. But we have to know what to look for and where to look for it.

The foundation of the Orderflows Bulge revolves around price delta inside a bar. There are several types of delta in order flow. There is bar delta which is the net difference between buyers and sellers in the entire bar. Then there is price delta which is the difference between the actual numbers of buyers and sellers at a price level in a bar. If the price level has positive delta then aggressive buyers were in control of that price level. If the price

level has negative delta then it can be said aggressive sellers were in control of that price level.

Remember, when an aggressive buyer, buys the offer that registers as +1 delta. The buyer lifted the offer. If an aggressive seller sold into the bid, that registers as -1 delta.

So how do we translate that data into useful information?

Think of it this way. You are a hedge fund trader have an opinion that the market is cheap because you think that the conditions are good for a market rally because of low interest rates and other market conditions. So, what do you do? You start buying or accumulating a position. You don't want to just go in and buy every offer instead you work bids and let the sellers come to you. You absorb all the selling the sellers have to do at that price.

When a trader or group of traders absorb all the selling the going, what happens next? The aggressive sellers eventually run out of supply and the selling just about stops or gets so light that it is not enough to move the market any lower. Markets move up on aggressive buying and markets move down on aggressive selling. When the aggressive selling stops there is very little left to move the market lower.

Order flow allows a trader to see exactly where the absorption is occurring in real time.

Looking at this sequence of volume footprint bars it would take an astute order flow trader to pick up that absorption was occurring.
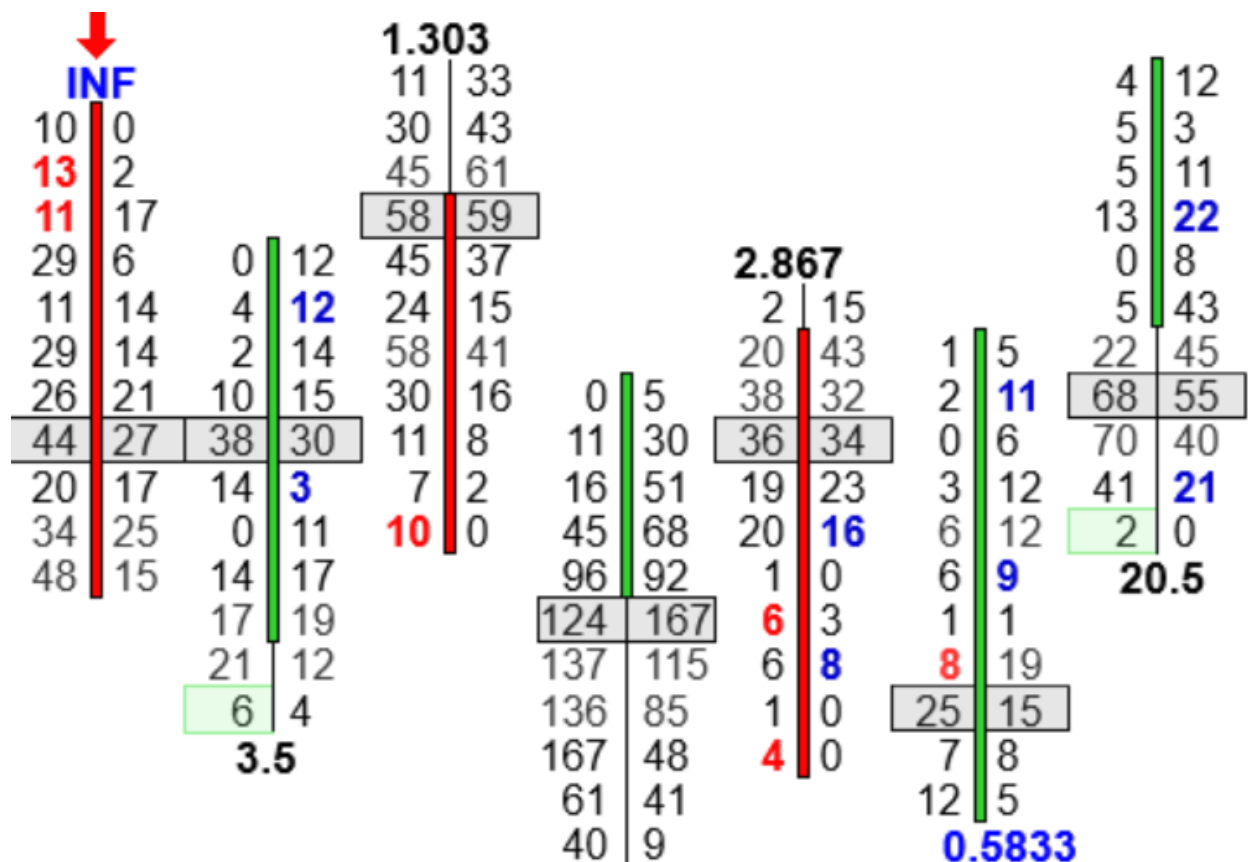
Order flow allows you to see inside the bar the actual volumes that traded. On the middle bar from the bottom up on the bid side. 40 lots, 61 lots, 167 lots, 136 lots, 137 lots. Now look at the volumes that were traded on the offer side from the bottom up 9 lots, 41 lots, 48 lots, 85 lots, 115 lots. It is consistently much lesser than the volume traded on the bid side. Aggressive sellers were quite active, but all that selling was met by passive buyers. Now compare those volumes to the bar around it, in any of the other bars you don't see any price levels that traded over 100 lots on the bid an offer.

What happening is a clear sign of absorption, you have a lot of selling, but the market couldn't move lower. The selling was absorbed by the buyers who were supporting the market.

For most traders it is difficult to see in a normal bid/offer footprint chart, but if your order flow software allows you to look at delta at the price and view a delta footprint chart, it becomes easier for you to see it.
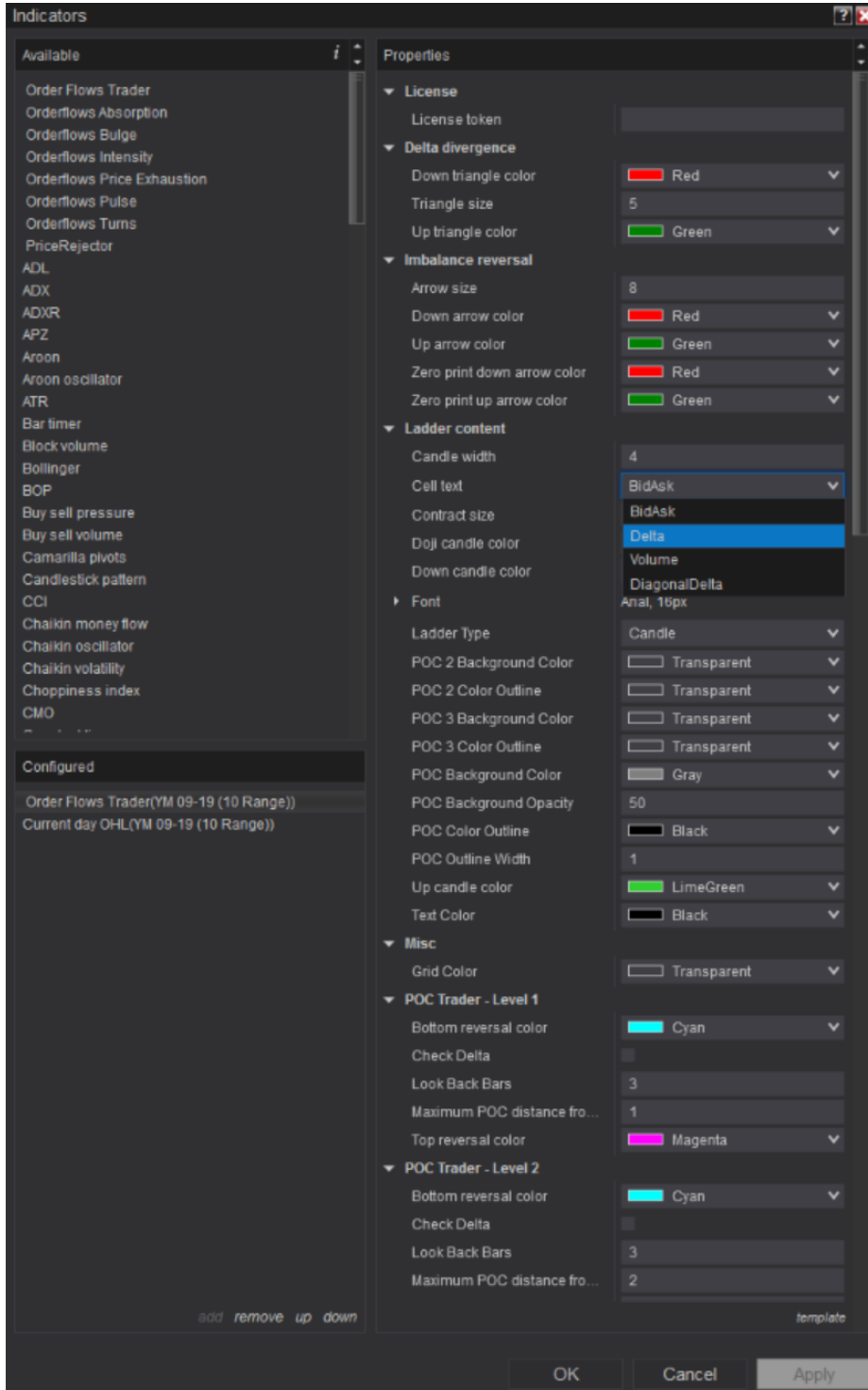
Here is the delta footprint of the same bars:
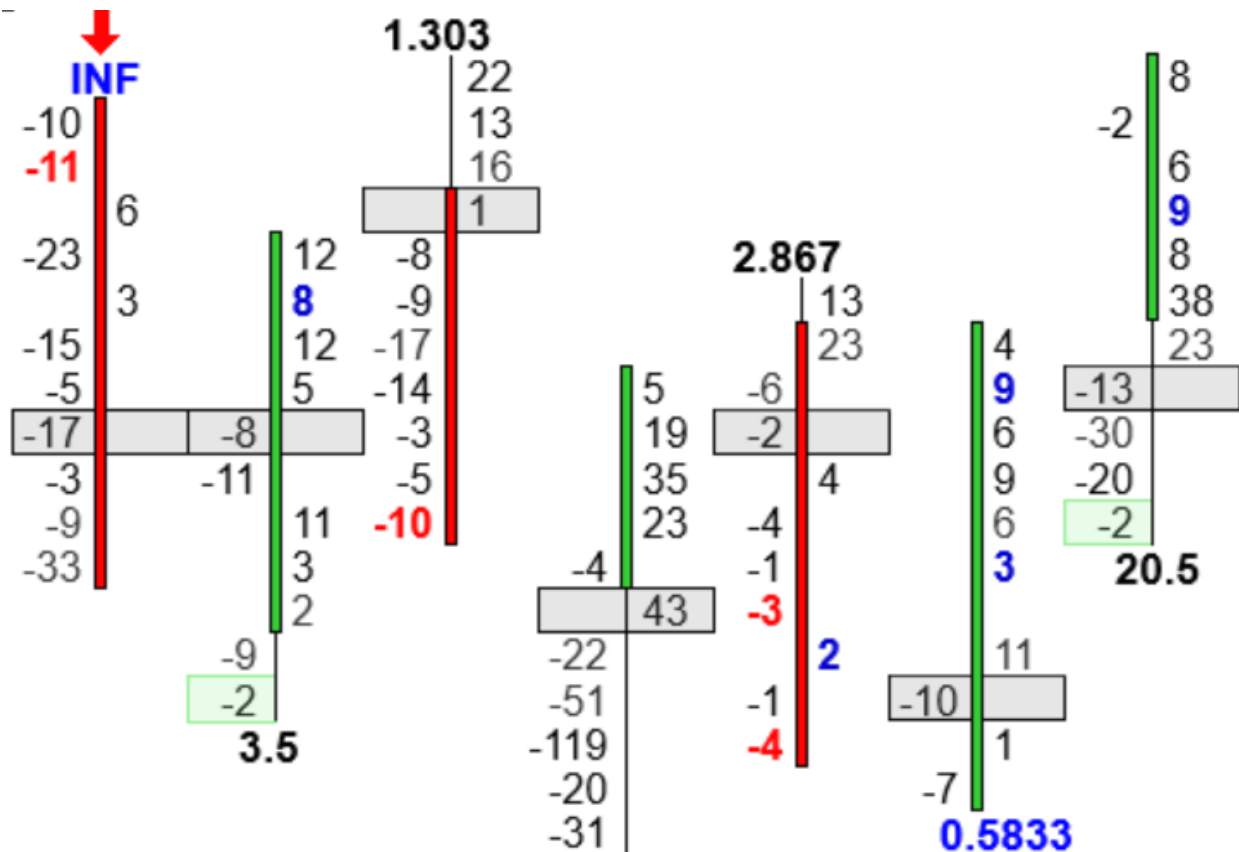


You can clearly now see the absorption occurring.

I know what you are probably thinking right now. Why aren't I looking at the diagonal delta, the delta on the bid versus the delta on the offer in the two-way auction instead of the linear price level. The reason is because I am looking at the volume traded at a particular price level and not in the two-way auction.

But finding a bulge is not just about finding the biggest price delta in a bar and generating a signal. It is the starting point.

The delta a price is just a number, the next step is to put it in context with what is happening in the market. There are other factors that are analyzed as well: where in the bar it appears, the

strength of the delta, recent price action, the price level it occurs in the bar.

The Orderflows Bulge Indicator makes it easy for the trader by instantly marking the chart when a bulge appears.
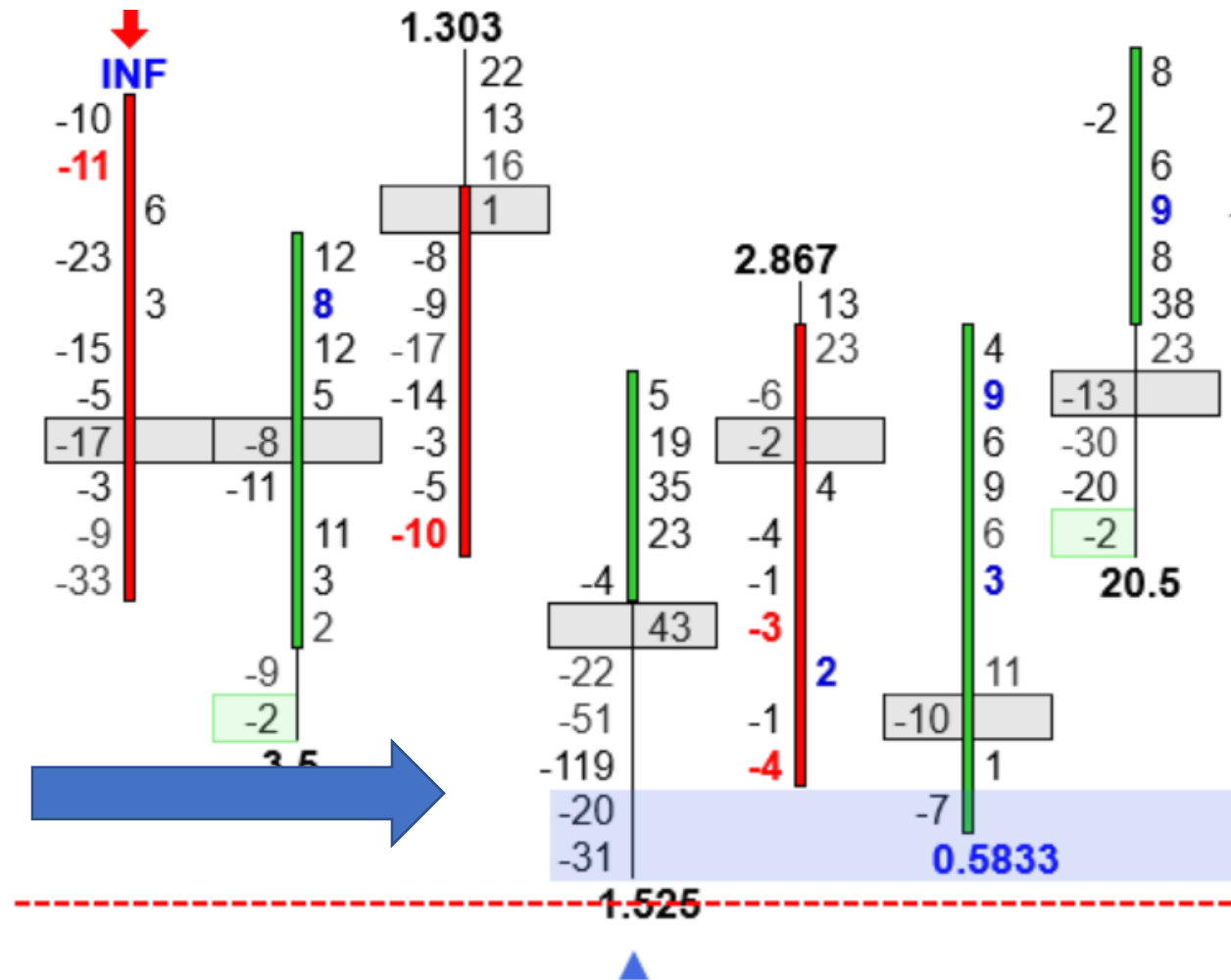


Trying to identify a bulge without the use of software is possible, I did it for many years, but when you let the computer do it for you it frees you up to analyze more of what is happening in the market.

Orderflows Bulge(YM 09-19 (10 Range))

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There are a few settings a user can adjust:

Size of the bulge.
If the bulge can occur anywhere in the bar.
If it occurs in a swing move or not.
If the bar has a Prominent POC.
If the bar delta confirms the bar price action.
If the bar delta diverges from the bar price action.

The most important setting is the size of the bulge you want detected. What you set it at depends on what market you are trading and what chart type/time frame you are trading.

**The size of the bulge setting is NOT a one size fits all.**

Different markets trade different volumes. I can't stress that enough. The volume traded in the ES, emini SP is much different than the volume traded in the eurocurrency futures.

So, what bulge volume do you use? Look at the market on the chart type you choose, determine what is an average delta number for a price level and double or triple it and start there.

For example, here is a 4 range emini SP chart in a delta footprint. I see that the average delta in a price level is about 200 lots and below. I start my analysis of the bulge volume at 500 because I want a "bulge" in the volume.
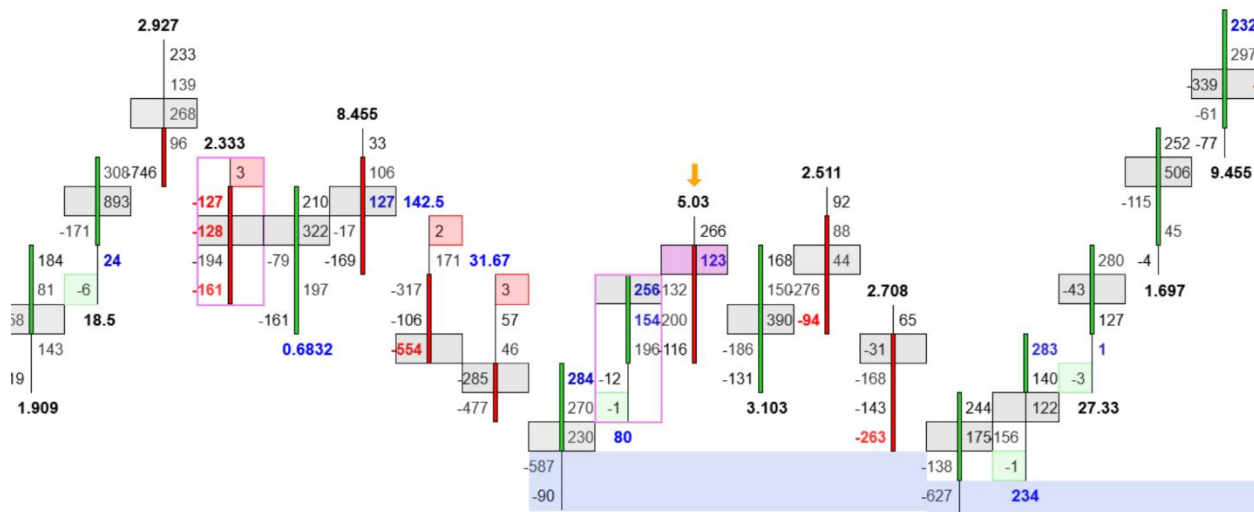


But to speed things up for you I will give you some starting points:
ES 1-minute and 4 range charts – 500
ES 5-minute and 8 range charts – 1000

CL 1-minute charts - 100
CL 5-minute charts - 200
NQ 1-minute chart and 10 range charts – 50
YM 1-minute chart and 10 range charts – 50

Ultimately, it is up to you the trader to determine what is the bulge volume that you are comfortable trading with. Do you want a lot of signals in a day or just a few? In your journey as a trader, YOU have to do some of your own research to find a level that you are comfortable with.

The more traders you talk to, the more you realize all the different time frames and chart types combinations that are possible. For me to list all of the different combinations here would be pointless since 95% would not be utilized. It is your job as a trader to take the indicator and apply it to the market you are trading and determine the settings that apply to both your market and chart.

I am not suggesting you curve fit the results. Instead look for the settings that make practical sense based on the order flow you normally see. For a bulge to appear it should be larger than the normal order flow. I use tiers. Like 25, 50, 100, 150, 250, 500. I don't try to optimize it with number like 18, 47, 121, etc. Use common sense.

For example, here is CL futures on a 5-minute chart. The first chart has the bulge volume set to 100. While the second chart has the bulge volume set to 200. You can easily see the difference in the amount of signals generated.
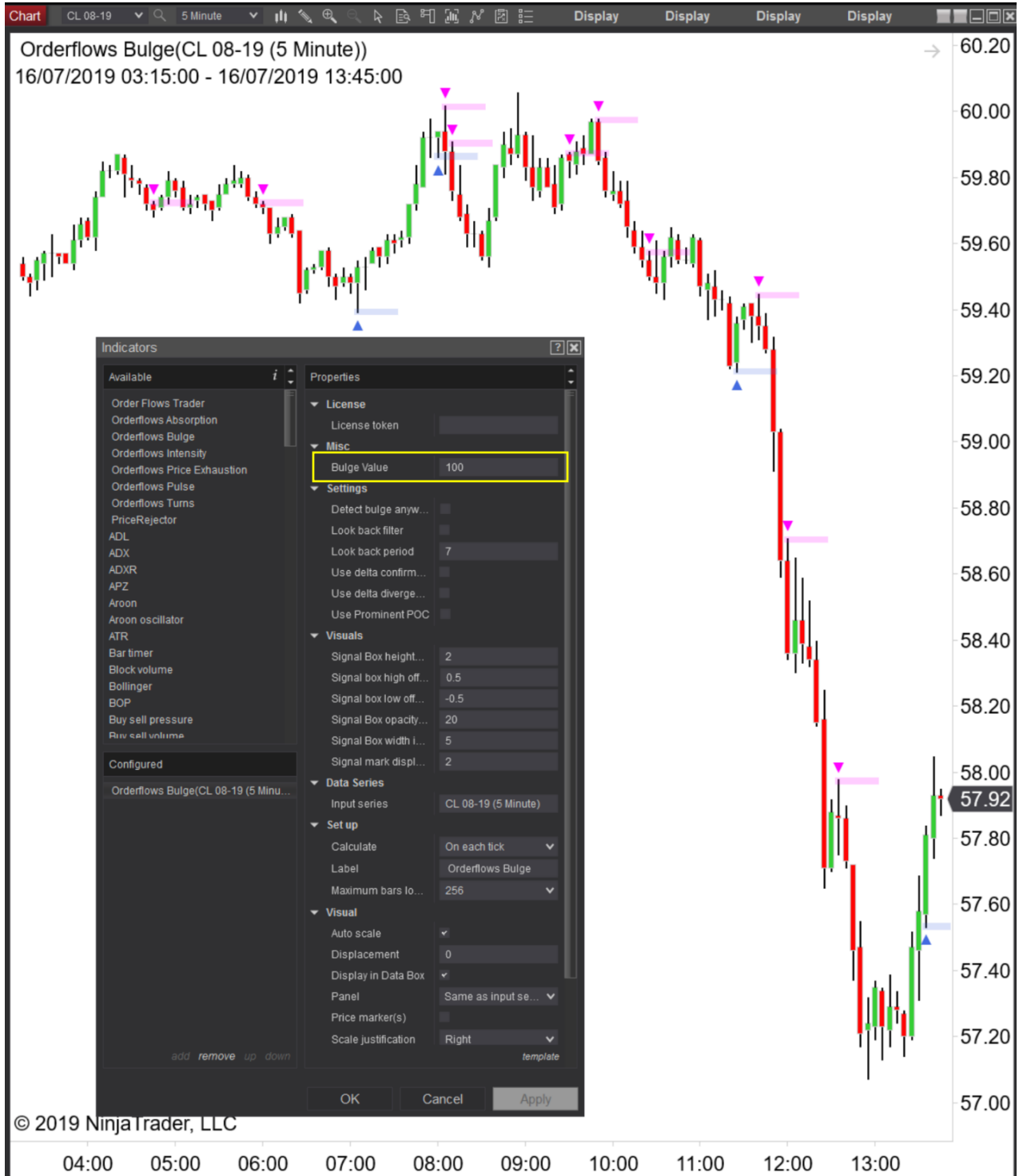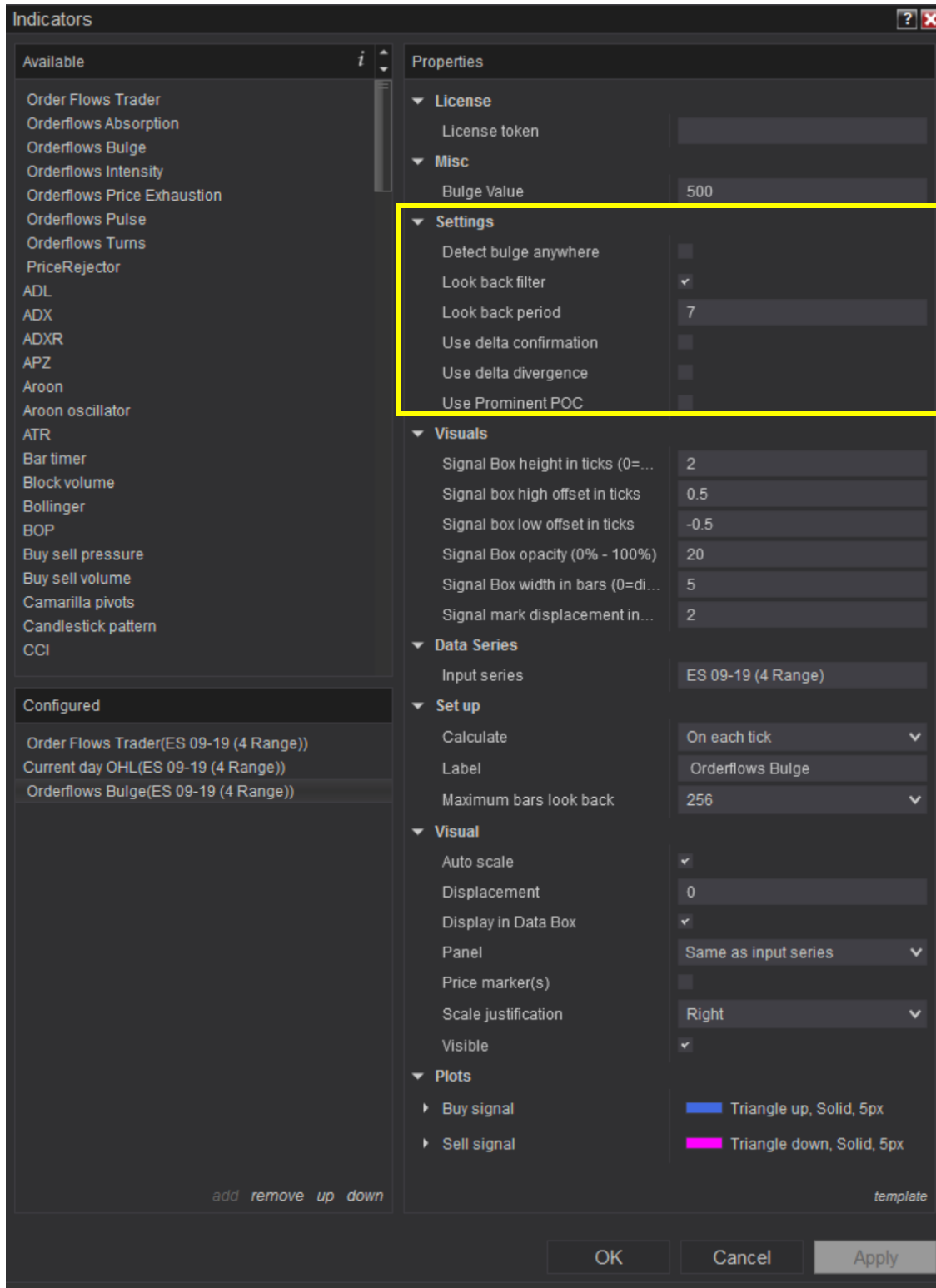
Here is a chart with the Bulge value set to 200. Notice the fewer signals:
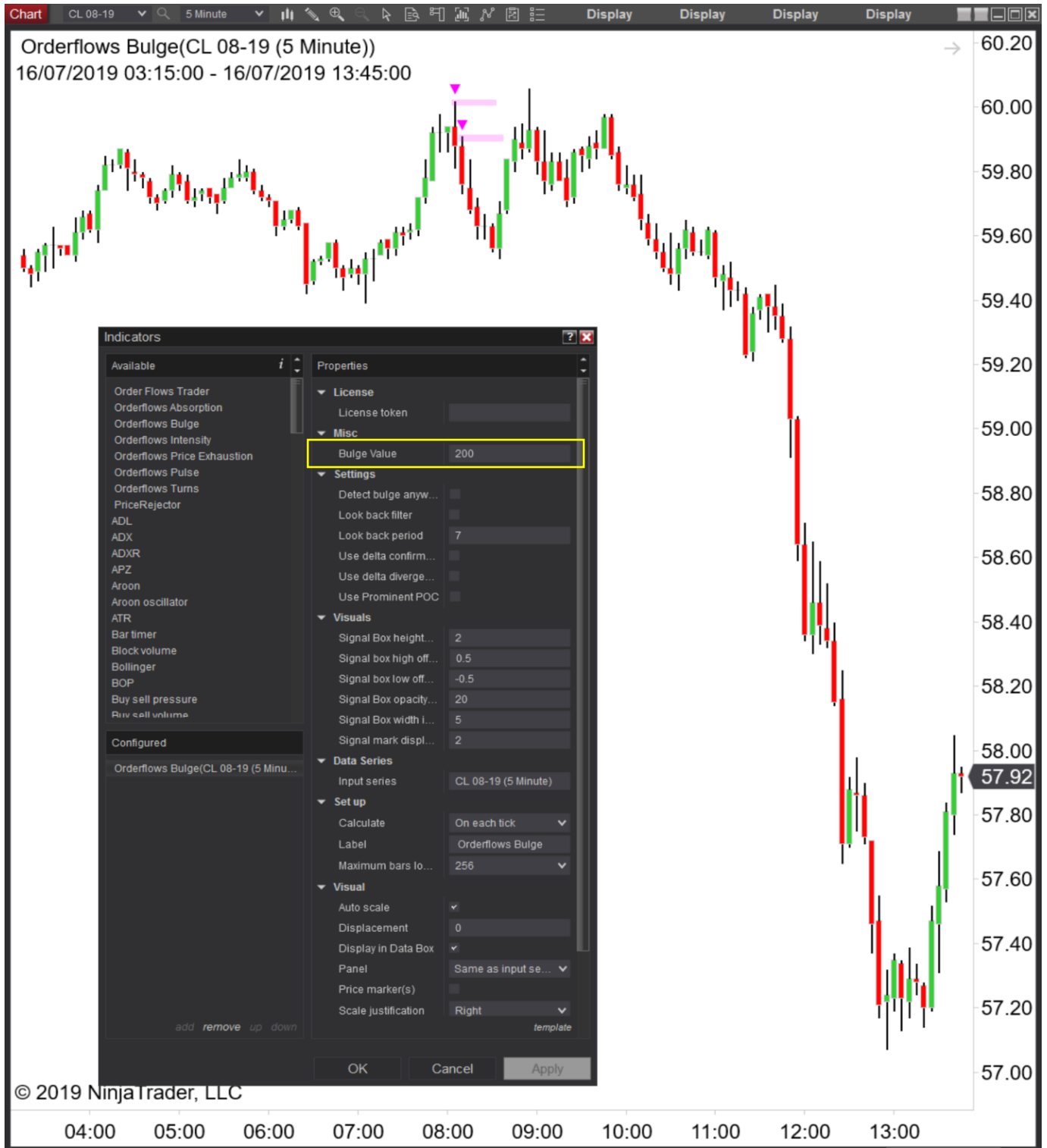
In the Settings, you can make some adjustments to filter or not filter signals.

The first Setting is "Detect Bulge Anywhere." The way I have used the bulge in the past was looking for bulges to appear at certain levels in a bar. When you enable "Detect Bulge Anywhere" it removes that restriction and doesn't take into account where a bulge occurs in the bar. The result is you will get more signals.

If you are a momentum trader, you should consider enabling detect bulge anywhere because a bulge can occur during a move which shows supportive buying on an up move or resistant selling on a down move.
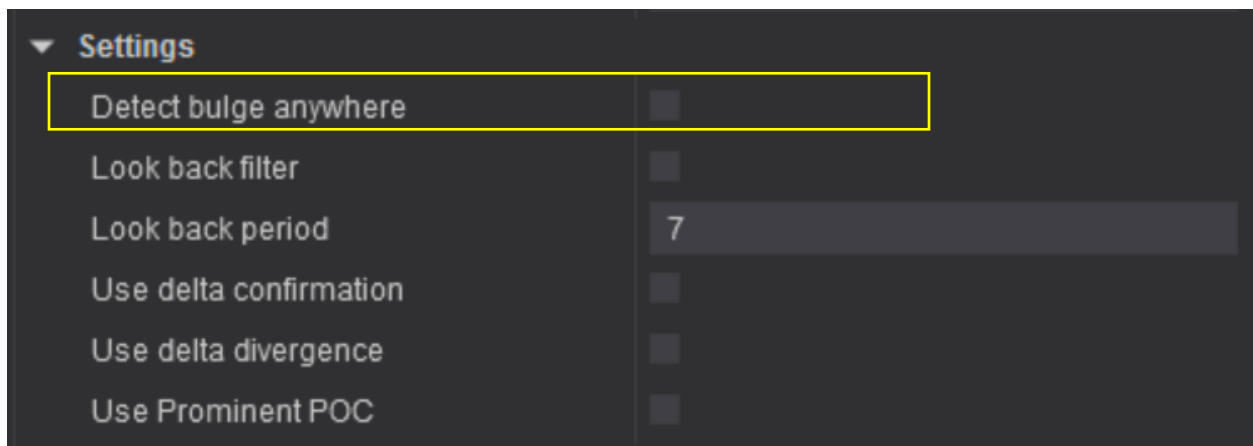
Here is an example where the "Detect Bulge Anywhere" is enabled, you will notice there are more signals than the second chart where the "Detect Bulge Anywhere" is not enabled.
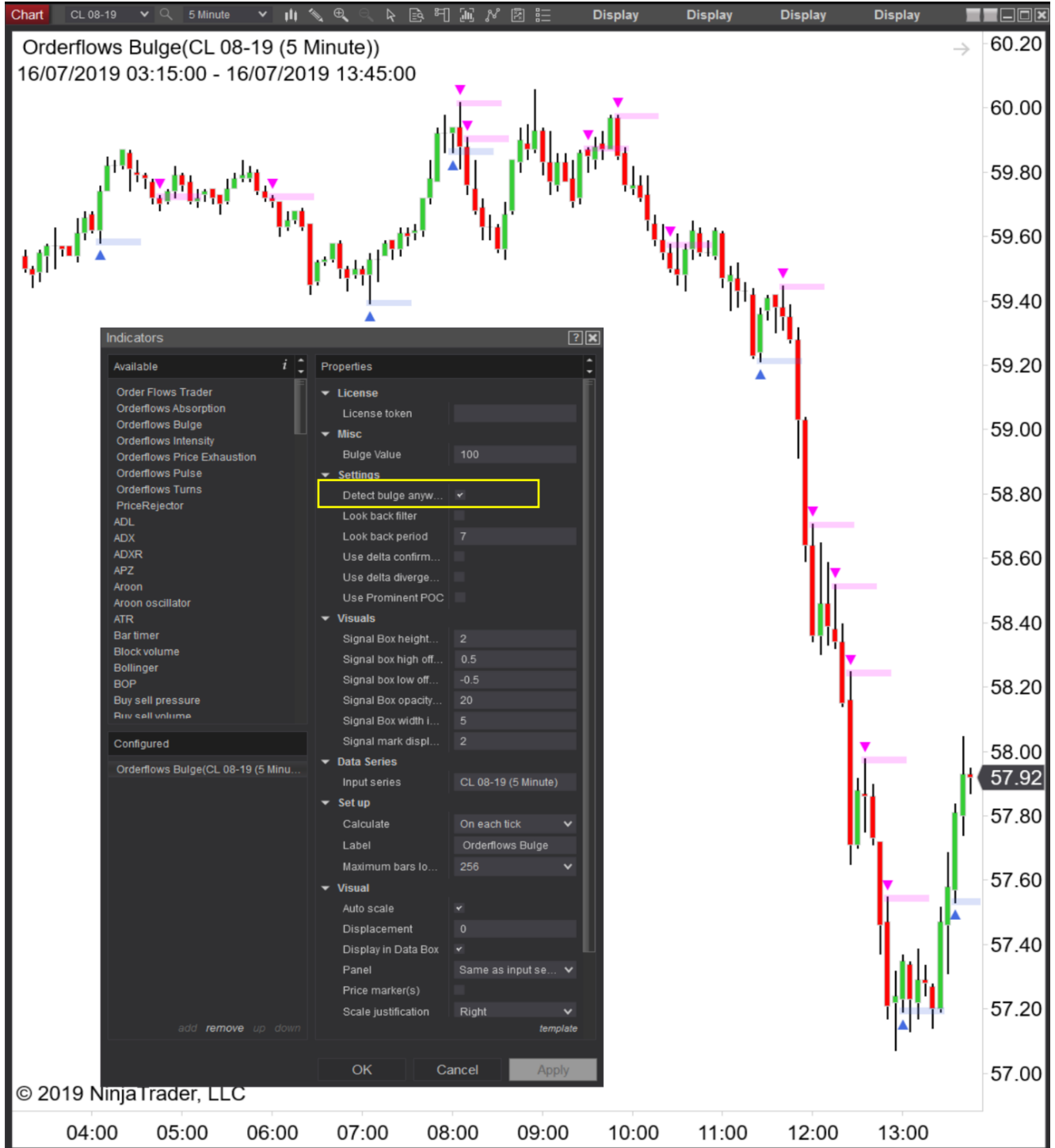
Compared to when "Detect Bulge Anywhere" is not enabled:

The next setting is the "Look Back Filter" and "Look Back Period."
When you enable the "Look Back Filter" you are asking the algo
to only detect bulges if the bar is a swing high or swing low. The
value you enter into the "Look Back Period" determines the
recency of the swing high or swing low. If the "Look Back Filter" is
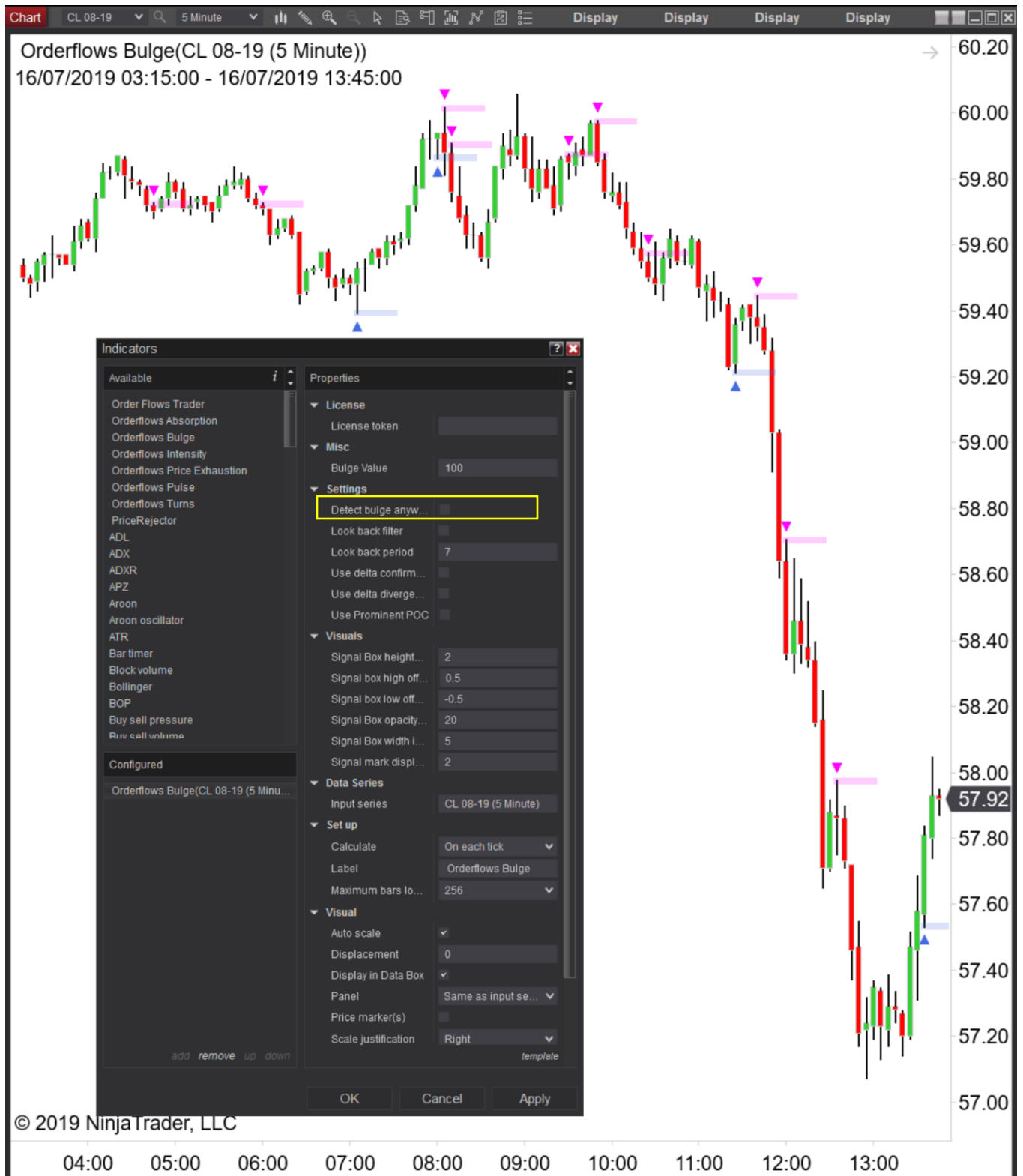not enabled, you will have more signals. If you enable the "Look
Back Filter" you will have much less signals as the algo will only
signal on swing highs or swing lows.

The default "Look Back Period" is set to 7 which is one week. But
if you want to make it longer, you can adjust it to 15 or 30. Or you
can tighten it to 1, 2, 3 or 5. It's totally up to you. The higher the
value the less signals. A lower value will generate more signals.
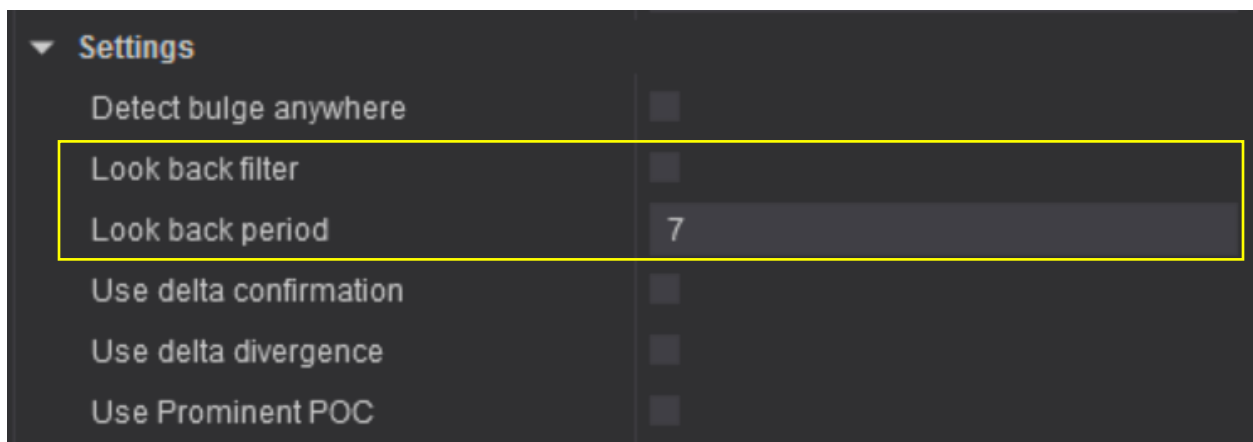
The first example is with the "Look Back Filter" enabled and the "Look Back Period" set to 7. You can see there are fewer signal than when the "Look Back Filter" is not enabled. You will also note that when it is enabled it only looks for trading opportunities when the market is experiencing a swing high or swing low.
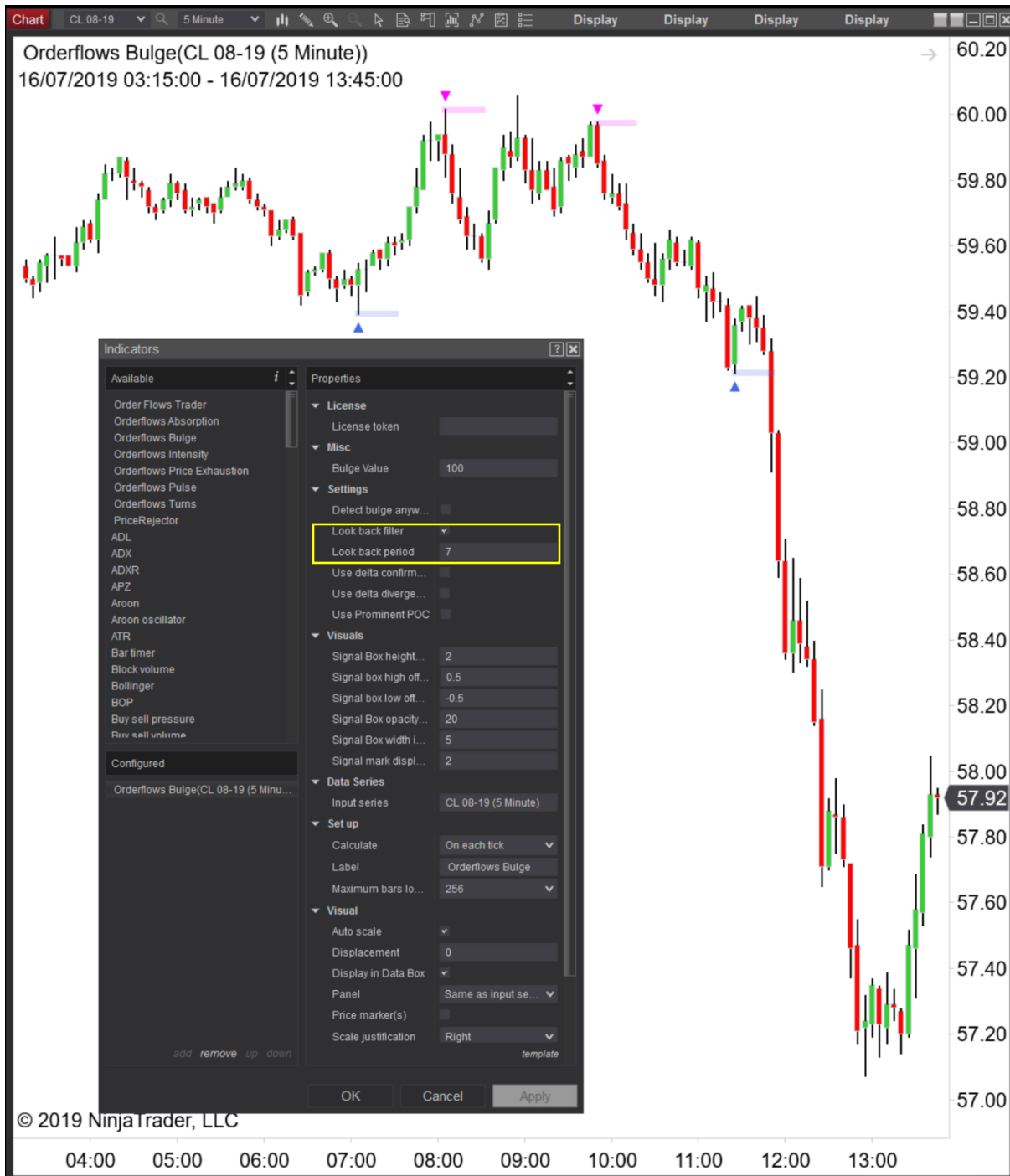
Compared to when "Look Back Filter" is not enabled:
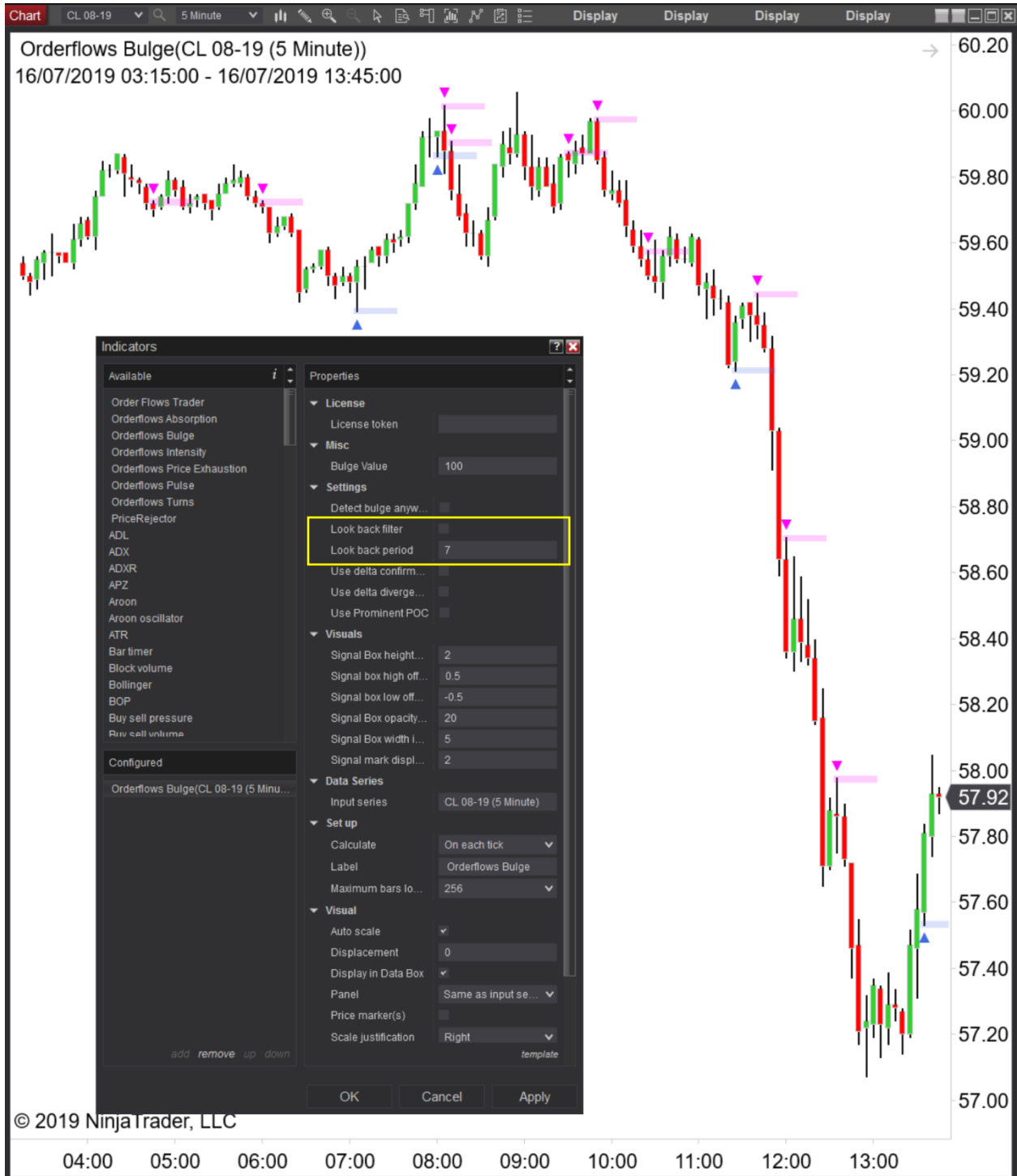
The next setting is delta confirmation. When this setting is enabled, it means that the bar delta has to be in the same direction as the bar direction. In other words, for a buy, the bar has to close higher than the open and the final delta for the entire bar has to be positive. For a sell, the bar has to close lower than where it opened, and the delta has to be negative.
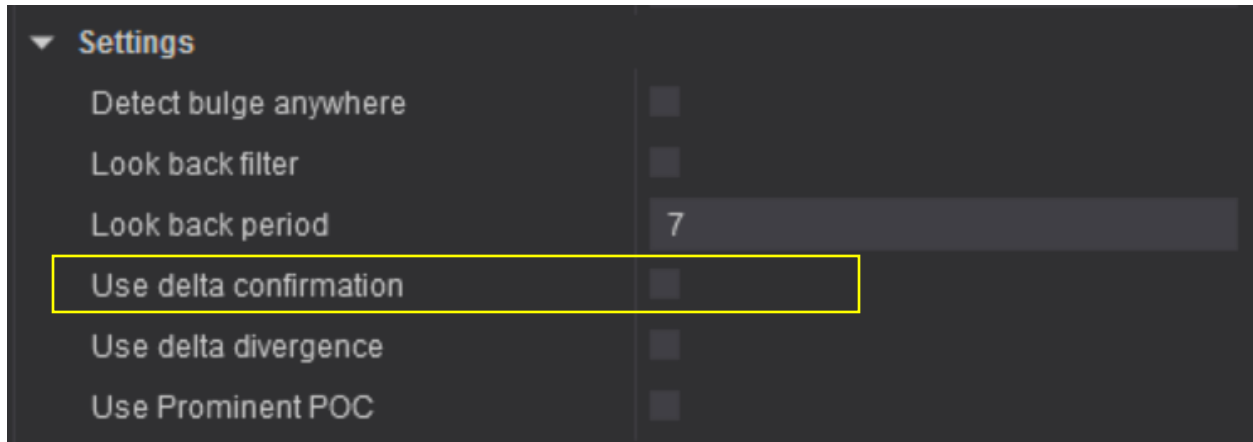
Here is an example of when "Delta Confirmation" is enabled.
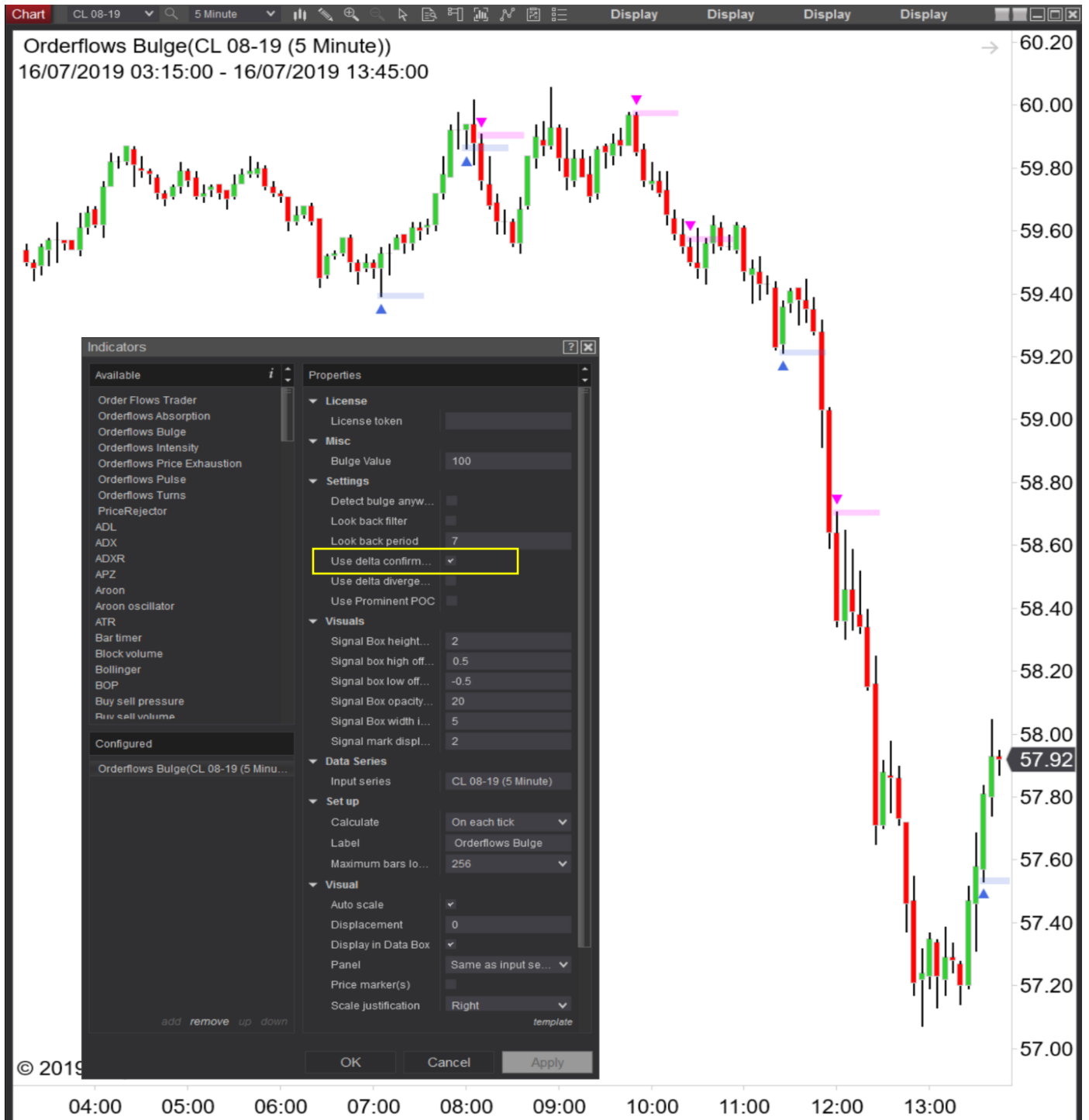
## Compared to when "Use Delta Confirmation" is not enabled:
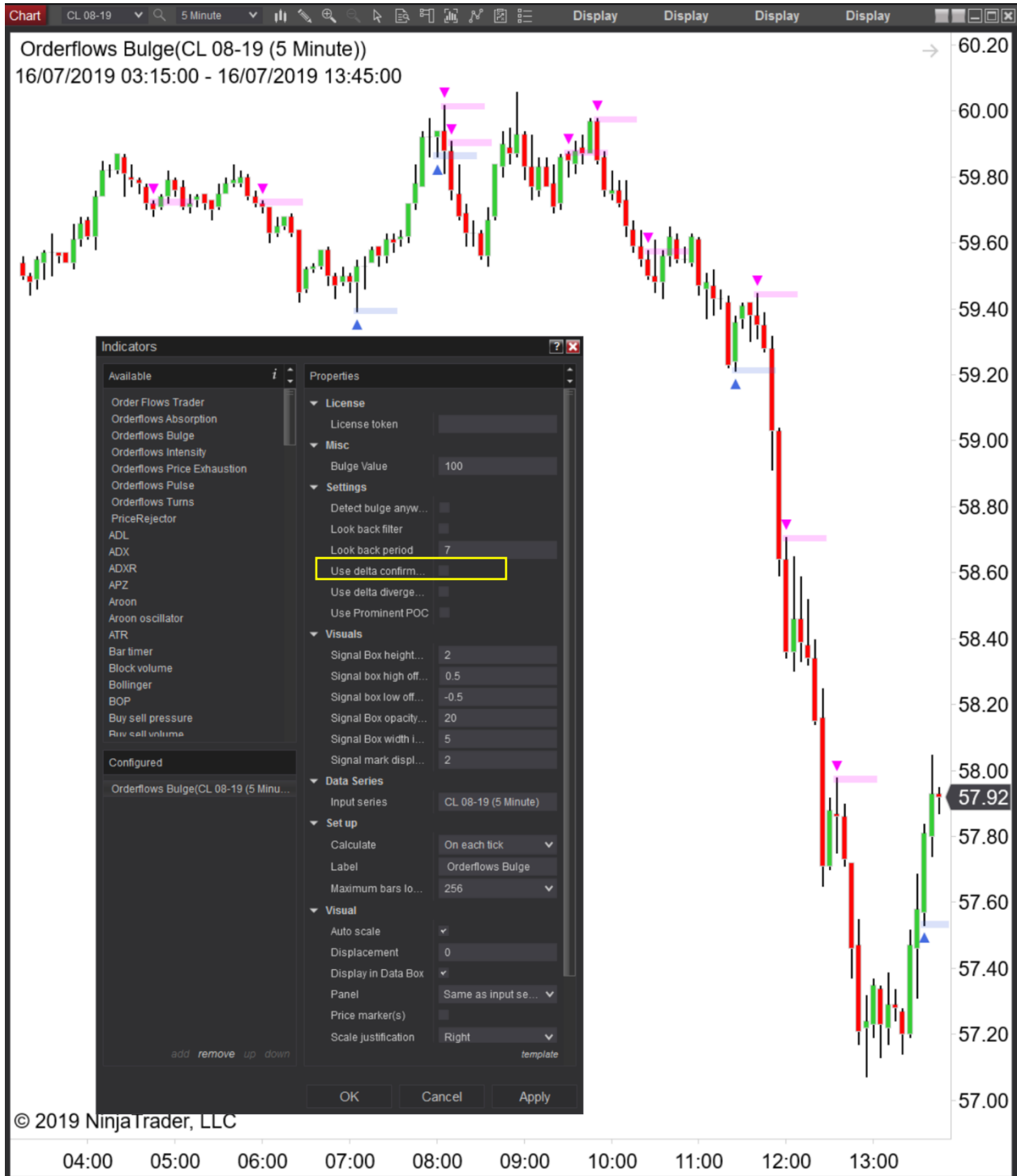
The next setting you can adjust is "Use Delta Divergence" and this is the opposite of delta confirmation. For a buy, the bar needs to be an up bar, a bar that closed higher than where it opened and the overall bar delta has negative delta. For a sell, the bar needs to have closed lower than where it opened and the bar delta finished positive.
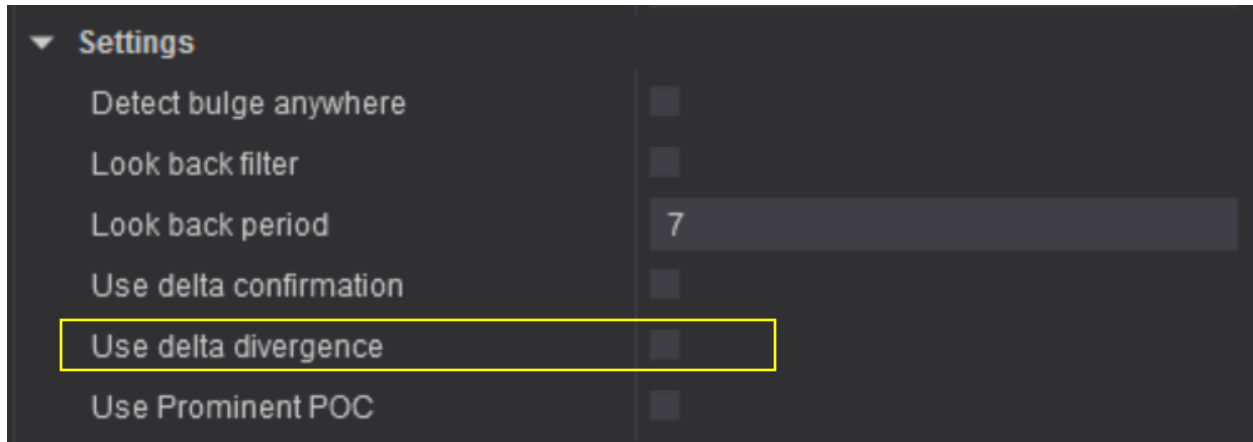
Here is an example of when the "Use Delta Divergence" is enabled:
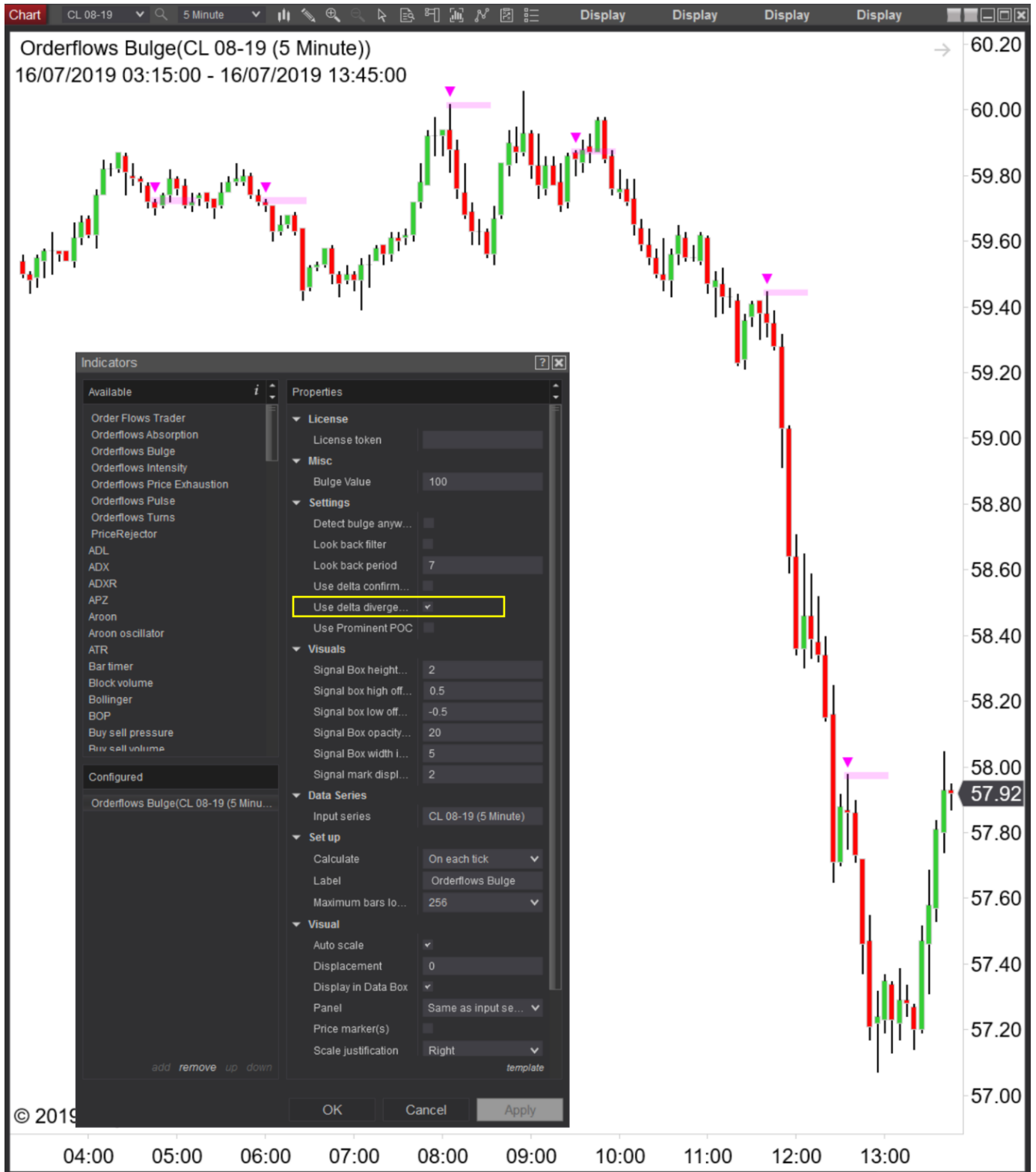
Compared to when "Use Delta Divergence" is not enabled:
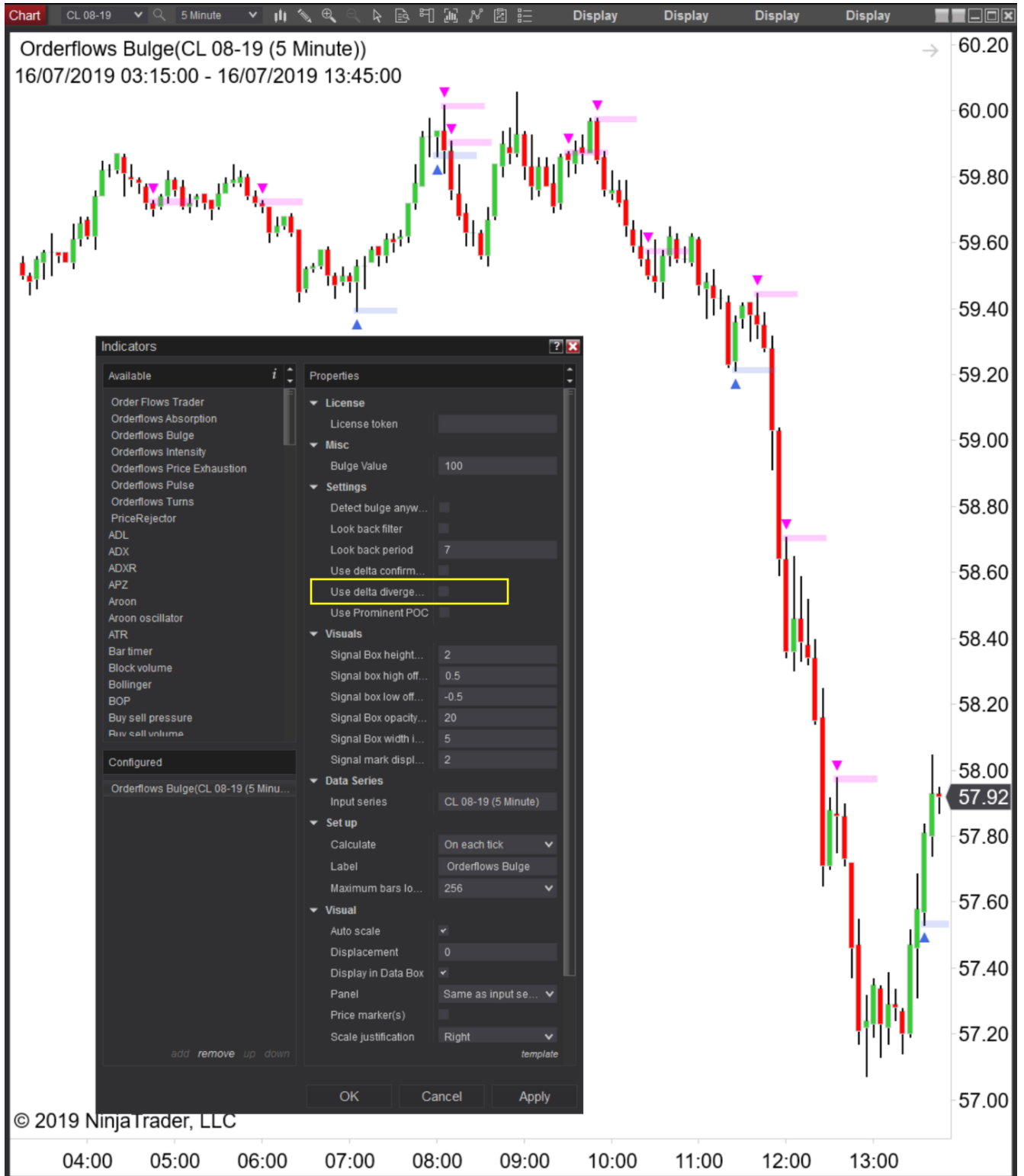
You should notice that the signals that appear in the delta confirmation and the delta divergence are different. It is a way to filter trading opportunities. Personally, I have found that when you use the bulge with delta divergence the signals are more indicative of support or resistance.

The last setting that the user can adjust is "Use Prominent POC." Every bar has a POC (Point of Control) – the price level where the most volume traded. However when combined with context of the overall market structure, some POC's matter more than others. This is what is called a Prominent POC. When you enable "Use Prominent POC" you are telling the algo to only give signals if the bar has a Prominent POC. When this is enabled you will get less signals since not Prominent POCs only occur under certain conditions. But when you combine a bulge with a Prominent POC you get some very strong signals.
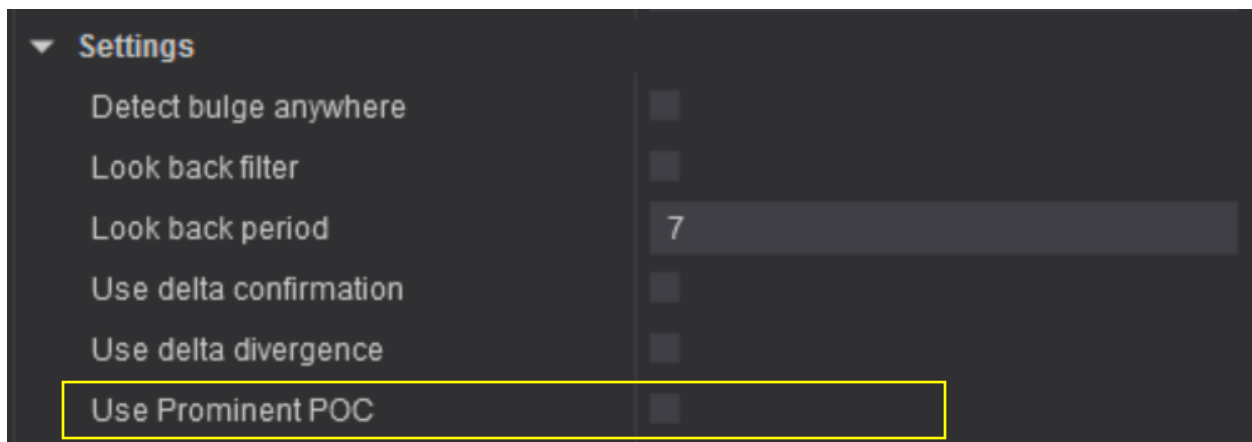
Here is an example of when "Use Prominent POC" is enabled:
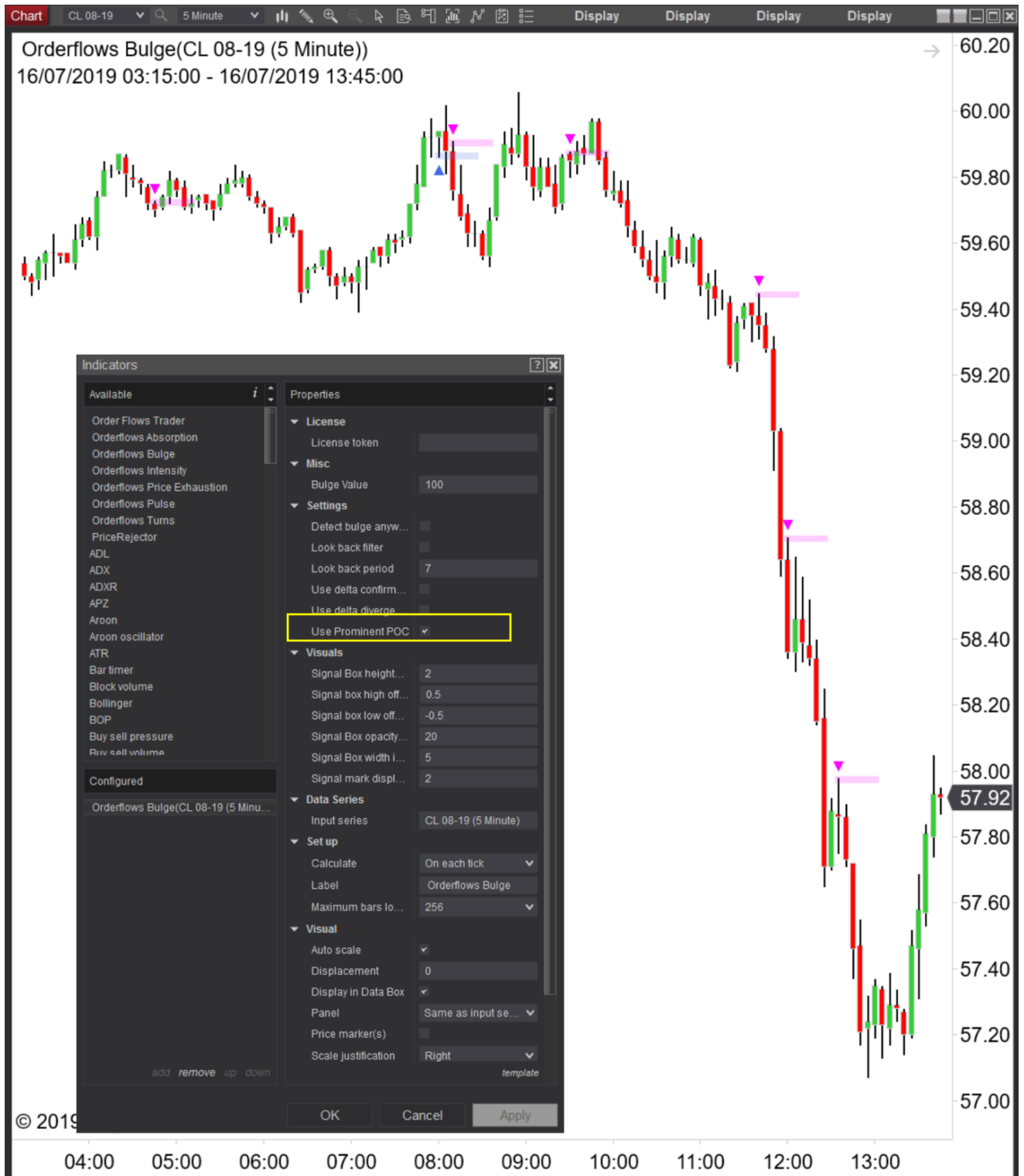
Compared to when "Use Prominent POC" is not enabled:
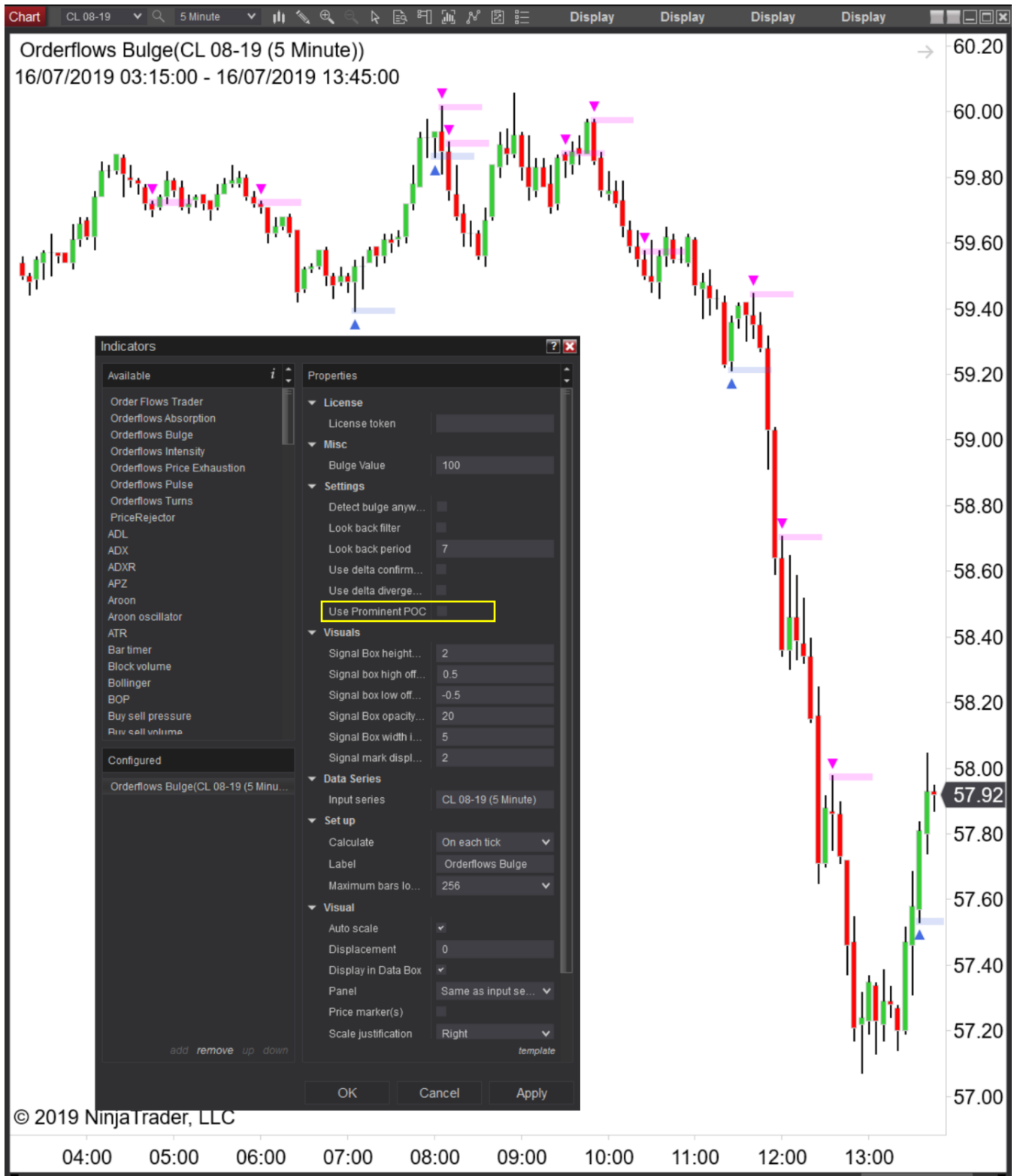
The next group of settings that you can adjust is the Visuals:

| Indicators | | ? ✕ |
|---|---|---|
| **Available** | *i* | **Properties** | |
| Order Flows Trader | | ▼ **License** | |
| Orderflows Absorption | | License token | |
| Orderflows Bulge | | ▼ **Misc** | |
| Orderflows Intensity | | Bulge Value | 500 |
| Orderflows Price Exhaustion | | ▼ **Settings** | |
| Orderflows Pulse | | Detect bulge anywhere | ☐ |
| Orderflows Turns | | Look back filter | ✓ |
| PriceRejector | | Look back period | 7 |
| ADL | | Use delta confirmation | ☐ |
| ADX | | Use delta divergence | ☐ |
| ADXR | | Use Prominent POC | ☐ |
| APZ | | ▼ **Visuals** | |
| Aroon | | Signal Box height in ticks (0=... | 2 |
| Aroon oscillator | | Signal box high offset in ticks | 0.5 |
| ATR | | Signal box low offset in ticks | -0.5 |
| Bar timer | | Signal Box opacity (0% - 100%) | 20 |
| Block volume | | Signal Box width in bars (0=di... | 5 |
| Bollinger | | Signal mark displacement in... | 2 |
| BOP | | ▼ **Data Series** | |
| Buy sell pressure | | Input series | ES 09-19 (4 Range) |
| Buy sell volume | | ▼ **Set up** | |
| Camarilla pivots | | Calculate | On each tick ⌄ |
| Candlestick pattern | | Label | Orderflows Bulge |
| CCI | | Maximum bars look back | 256 ⌄ |
| **Configured** | | ▼ **Visual** | |
| | | Auto scale | ✓ |
| Order Flows Trader(ES 09-19 (4 Range)) | | Displacement | 0 |
| Current day OHL(ES 09-19 (4 Range)) | | Display in Data Box | ✓ |
| Orderflows Bulge(ES 09-19 (4 Range)) | | Panel | Same as input series ⌄ |
| | | Price marker(s) | ☐ |
| | | Scale justification | Right ⌄ |
| | | Visible | ✓ |
| | | ▼ **Plots** | |
| | | ▶ Buy signal | ▬▬ Triangle up, Solid, 5px |
| | | ▶ Sell signal | ▬▬ Triangle down, Solid, 5px |
| *add   remove   up   down* | | | *template* |
| | | OK | Cancel | Apply |

Signal Box height in ticks (0=disable) – default is 2. This setting determines how tall the signal box/zone is. If you don't want it, then set it to zero.

Signal box high offset in ticks – default is 0.5. This setting determines where to start draw the signal box at the top of the bar. At 0.5 it starts just above the high of the bar for a sell.

Signal box low offset in ticks – default is -0.5. This setting determines where to start draw the signal box at the top of the bar. At -0.5 it starts just below the low of the bar.

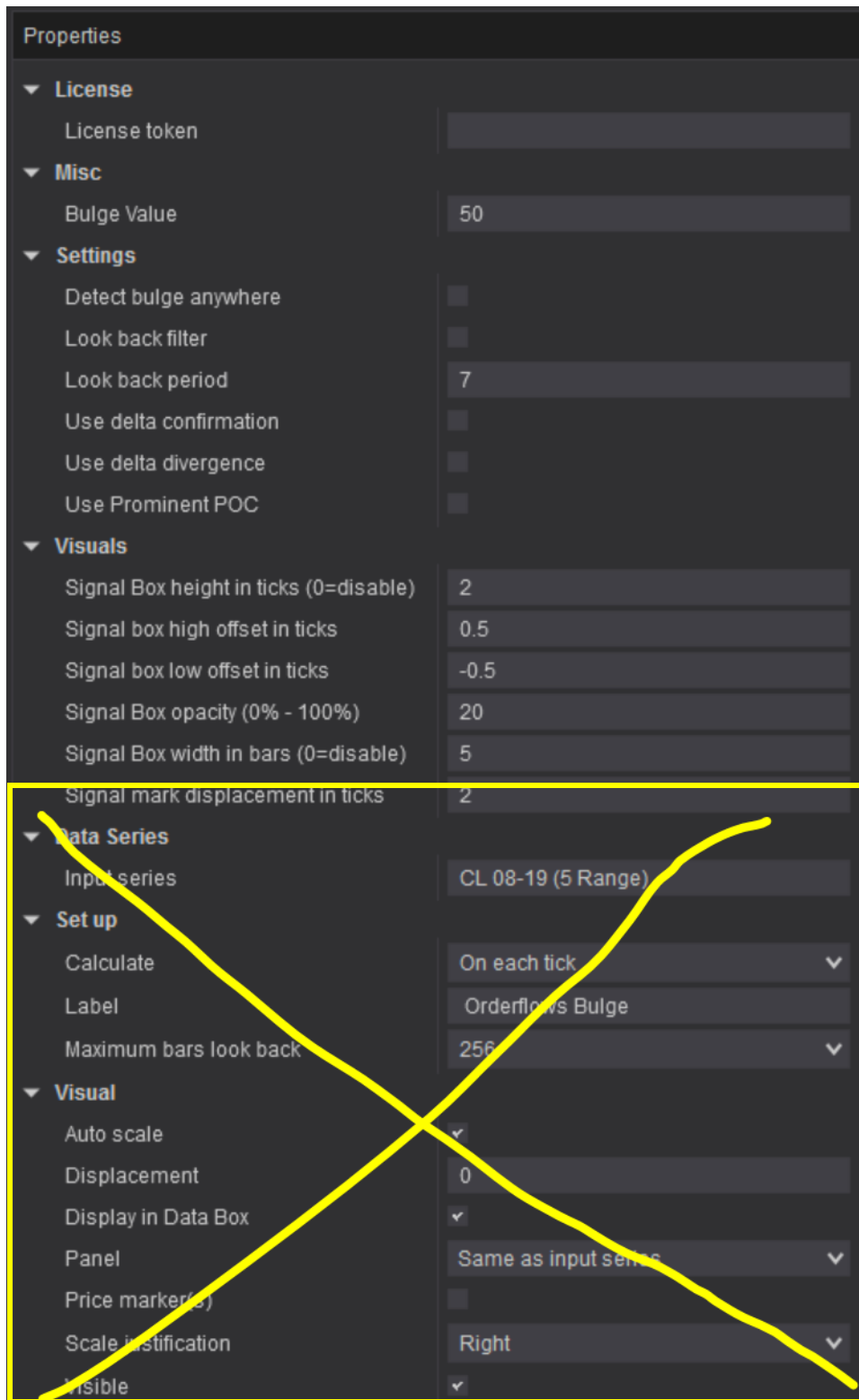Signal box opacity (0%-100%) – default is 20. This setting determines how dark you want the signal box/zone to be. If you want a darker box on your chart, simply set it higher, like 80 or 90.

Signal Box width in bar (0=disable) – default is 5. This setting determines how many price bars out to draw the box. If you don't want to draw out the box, set it to 0. If you want a longer box, set it to a higher value, like 10 or 15 or 20.

Signal mark displacement in ticks – default is 2. This setting determines how far away from the bar to draw the signal arrow (or whatever you have it set as). If you want it closer, then change the setting to 1. If you want it further away, set it higher like 5 (not recommended). I find the setting of 2 is just nice.

The group of settings: Data Series, Set Up and Visual you do not need to touch or change. Just leave them alone.

| Properties | |
|---|---|
| ▼ **License** | |
| License token | |
| ▼ **Misc** | |
| Bulge Value | 50 |
| ▼ **Settings** | |
| Detect bulge anywhere | ☐ |
| Look back filter | ☐ |
| Look back period | 7 |
| Use delta confirmation | ☐ |
| Use delta divergence | ☐ |
| Use Prominent POC | ☐ |
| ▼ **Visuals** | |
| Signal Box height in ticks (0=disable) | 2 |
| Signal box high offset in ticks | 0.5 |
| Signal box low offset in ticks | -0.5 |
| Signal Box opacity (0% - 100%) | 20 |
| Signal Box width in bars (0=disable) | 5 |
| Signal mark displacement in ticks | 2 |
| ▼ **Data Series** | |
| Input series | CL 08-19 (5 Range) |
| ▼ **Set up** | |
| Calculate | On each tick ⌄ |
| Label | Orderflows Bulge |
| Maximum bars look back | 256 ⌄ |
| ▼ **Visual** | |
| Auto scale | ✓ |
| Displacement | 0 |
| Display in Data Box | ✓ |
| Panel | Same as input series ⌄ |
| Price marker(s) | ☐ |
| Scale justification | Right ⌄ |
| Visible | ✓ |

The last group of settings is the Plots. These settings determine how you want the signal to appear on the chart. You can adjust the color, shape and size. If you have another indicator that uses the same shapes and colors you may want to change them.

# How to trade a Bulge?

The Bulge indicates either an area of support or an area of resistance and should be traded as such. If you are seeing support you buy, if you are seeing resistance you sell.

The way I trade order flow in general is I wait for the bar where the signal is occurs to close. Once the bar is closed and the signal printed it won't change. If a bar is still trading and a signal is formed, there is a chance the subsequent order flow will cancel out the signal and the signal will disappear and you will find yourself in a trade you don't want to be in.

Once a bar has closed and the signal is there. I look for the market to move in the direction I expect it to.

In other words, if a buy signal appears, I look for the next bar to take out the high of the signal bar. If a sell signal appears, I look for the next bar to take out the low of the signal bar. Now bear in mind it doesn't have to happen in the very next bar. But I like to see it happen within 1-2 bars after the signal appears.

On a range-based chart it will happen on the next bar since that is how range based bars work. However, on minute-based charts, often times the market goes sideways over the next several bars and I won't take a trade based on the sideways action.

On this chart, a 5-minute ES chart, I would wait for the signal bar to close, then as soon as the next bar took out the high of the signal bar, I would get long.
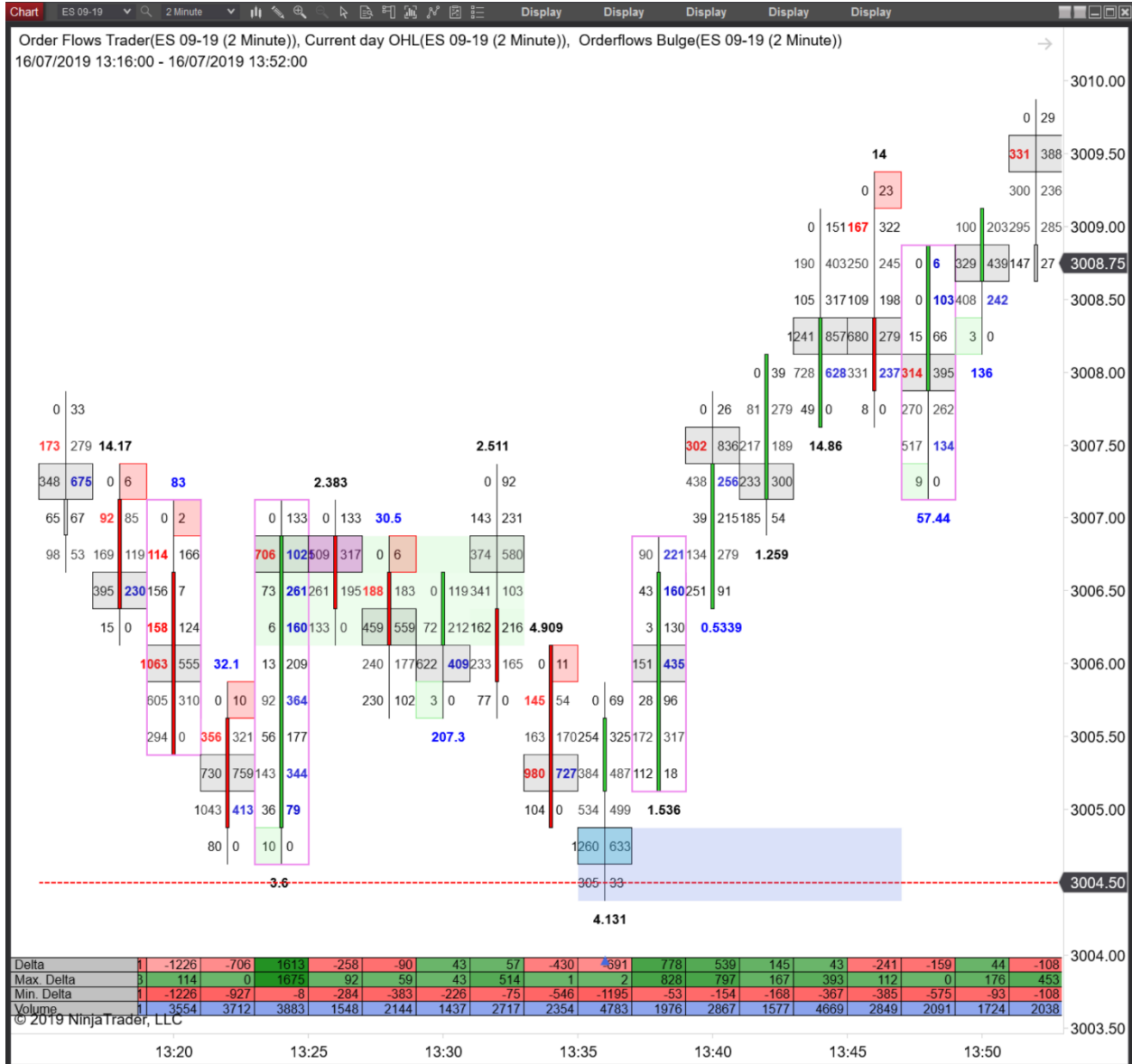
This is an example of a signal I would not take. A sell signal is generated, but the next bar rallies instead of selling off and taking out the low of the signal bar. Even the 2nd bar after the signal bar also rallies and takes out the high of the previous bar.
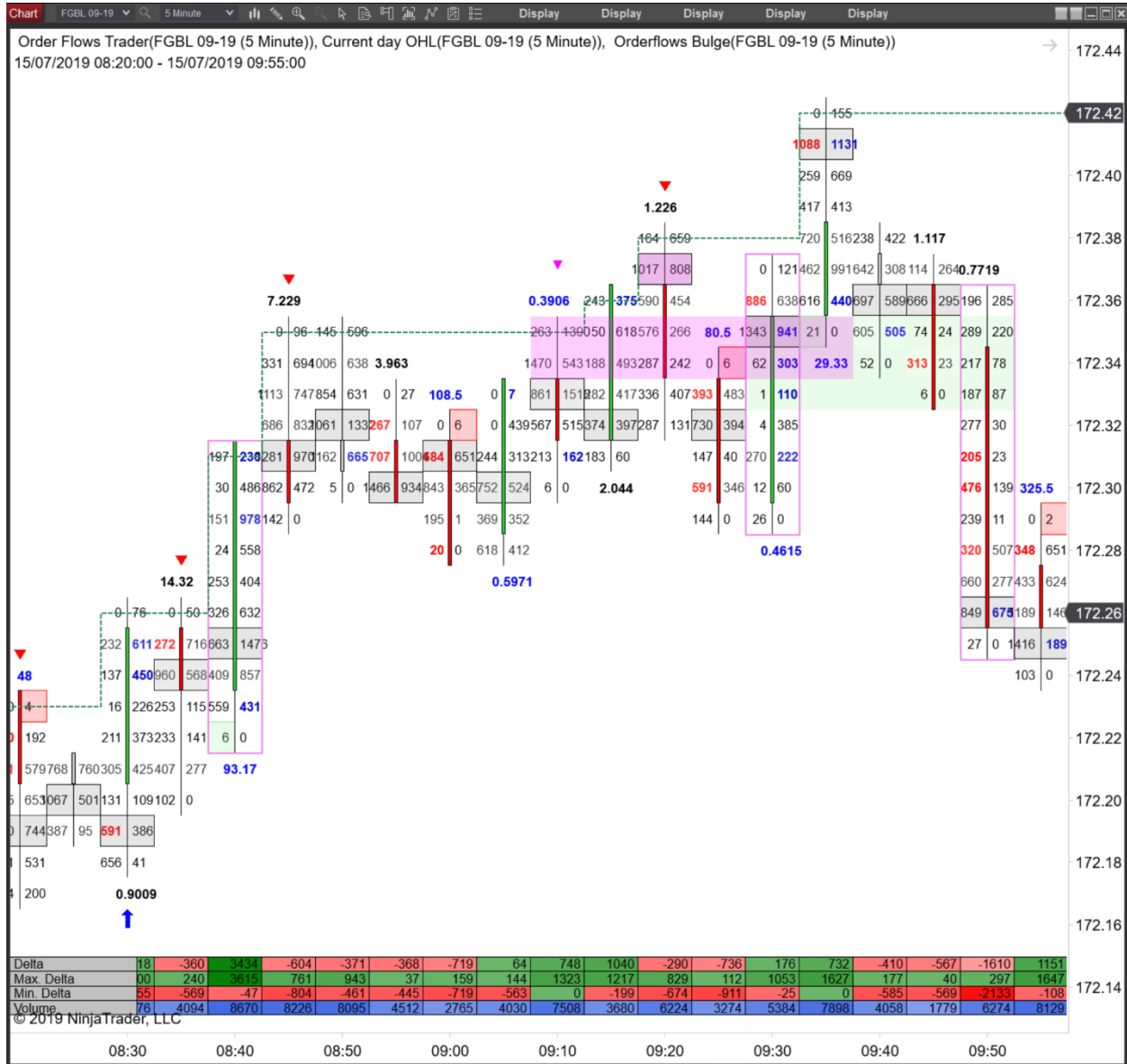


This is something a lot of traders struggle with. Knowing when to take a signal and when not to take a signal. The reason so many traders fail with indicators is they don't trade with the market. If you have a sell signal and the market immediately rallies, you are

going to get stopped out. Let the market tell you that it is indeed moving in the direction the signal is telling you.

The thing to remember with order flow is that the constant flow of trades will either confirm or invalidate a trade immediately. If the order flow following a signal is not complimentary to the signal, the signal will more often than not, fail.

When the market does what is expected we don't notice it, because that is what we expect it to do. It is when the market is not doing what is expected that we need to be alert. This applies to all of trading, not just order flow. What doesn't happen when it should happen that matters.

## Where do you place your stop?

I place stops where the trade premise is invalidated. What that means is if I am getting long based on a Bulge appearing, if the market took out the low of the signal bar, the trade premise is invalidated and there is no reason to be in the trade.

The same is true for a sell. If you get short based on a Bulge, you would place your buy stop above the high of the signal bar. If you are short and the market rallies past the bulge and takes out the high of the signal bar. You have to get out of the trade immediately. But I give it more than 1 tick past the signal bar high or low. On a sell, I would place my stop 2 ticks above the high of the signal bar. On a buy I would place my stop 2 ticks below the signal bar. Now, you as a trader have to decide if that plan is good enough for you or if you want a wider or tighter stop placement. We are all different in how we handle losses.

This is the main reason the software draws a zone on the chart. It gives me a visual reference on where I should be getting out of the trade.
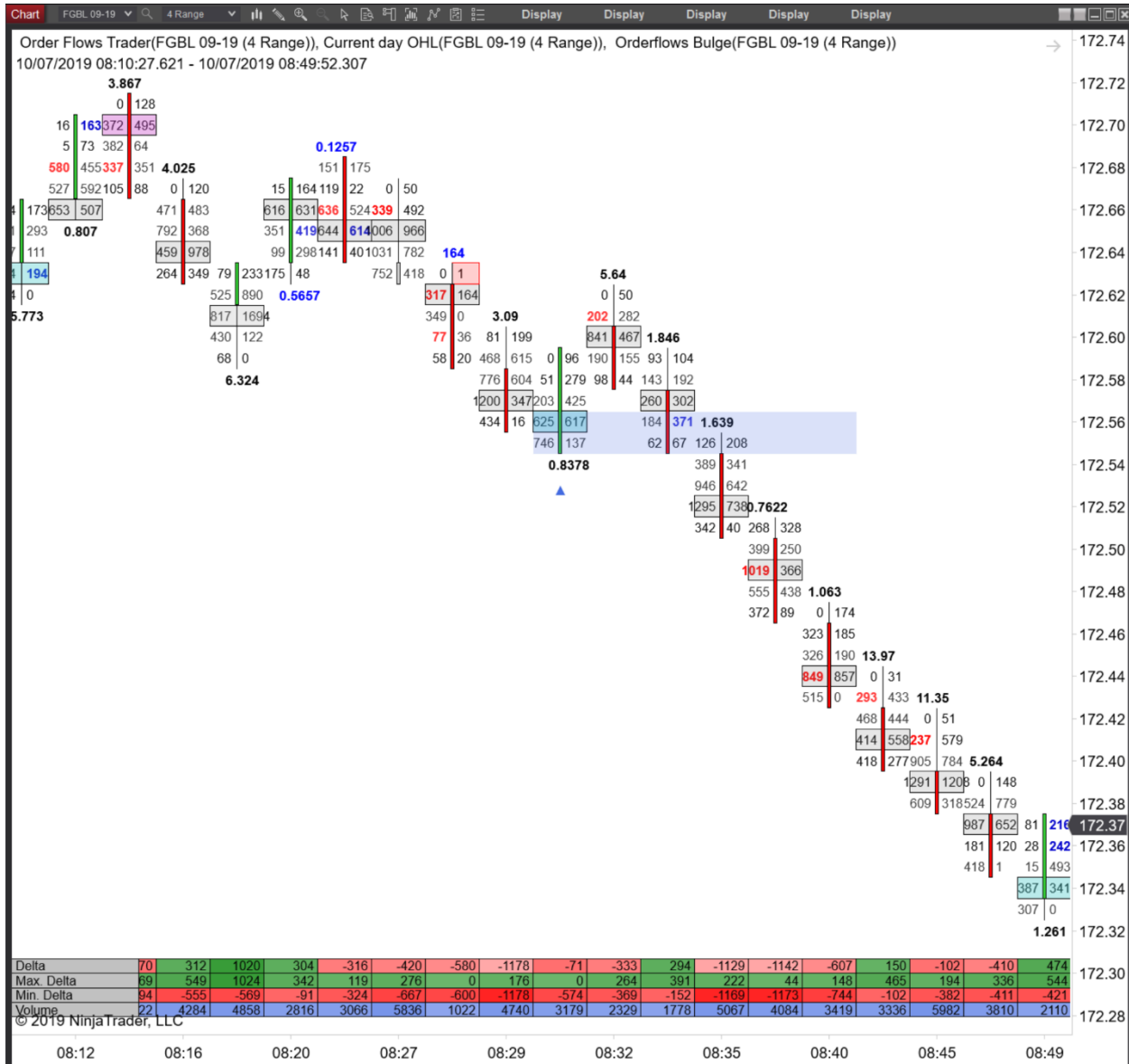


# Where do you take profit?

Taking profits is a difficult subject for many traders. Some traders will argue that they are blue in the face that you can only take profits if the market has given you at least a 2-1 R:R. While there

is nothing wrong with that, I really believe a trader has to take an active role in trade management. Order flow is like a river in that there is a constant flow of new trades coming into the market. This constant flow is constantly changing sometimes dominated by buyers, other times dominated by sellers. After you get into a trade you want to see the order flow going in the direction you are positioned in. If it is you will see better than 2-1 return. But when it is not, you can be happy to get what you can out of the trade.

I will say this much, start with a 1-1 or 2-1 take profit-stop loss and manage your position. I know not everyone is good at that, but with experience you will. At a minimum, use the ATM provided by NinjaTrader to get your orders in after getting into a trade so that it is there.

To wrap this up, but now you should realize that order flow does not involve an advanced degree in applied mathematics to understand and make efficient use of the data presented to you in the footprint chart. But you do need a way to organize it.

The Orderflows Bulge is a tool that allows you to see areas of support/resistance, absorption and market participation. When you couple that information with market context you put yourself far ahead of most of the traders out there.

Enjoy and happy trading.

Michael Valtos

May all your trades be as picture perfect as this…