Project Platform:
MetaTrader 4 (MT4 - MQL4)

Project Type:
Indicator

Project Description:
Add rays to existing indicator. Existing indicator has 3 envelopes with ability to shift envelopes back to identify cycles. Would like to add a ray to each envelope midpoint and outer bands originating from the shift distance back looking forward as a ray. The ray would be based on a selectable amount of bars back from the envelope end (approx 5 or more bars) and project into the future a set length past current price action (approx 5 or more bars).
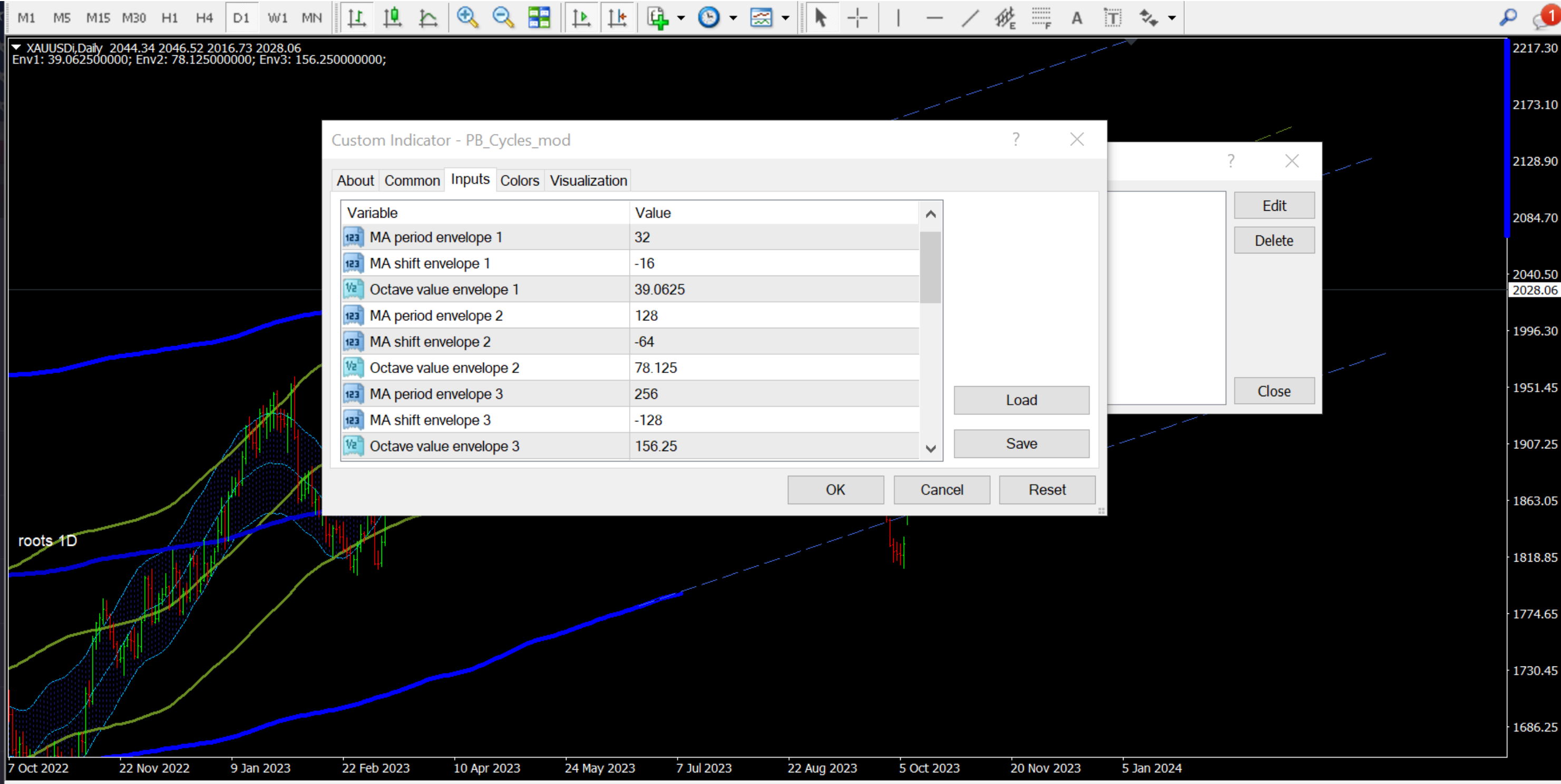EX. If envelope is shifted back -128 bars. I would like a ray originating approximately -122 bars back based on slope of bars 122-128 and extending to current price +5 or more bars.
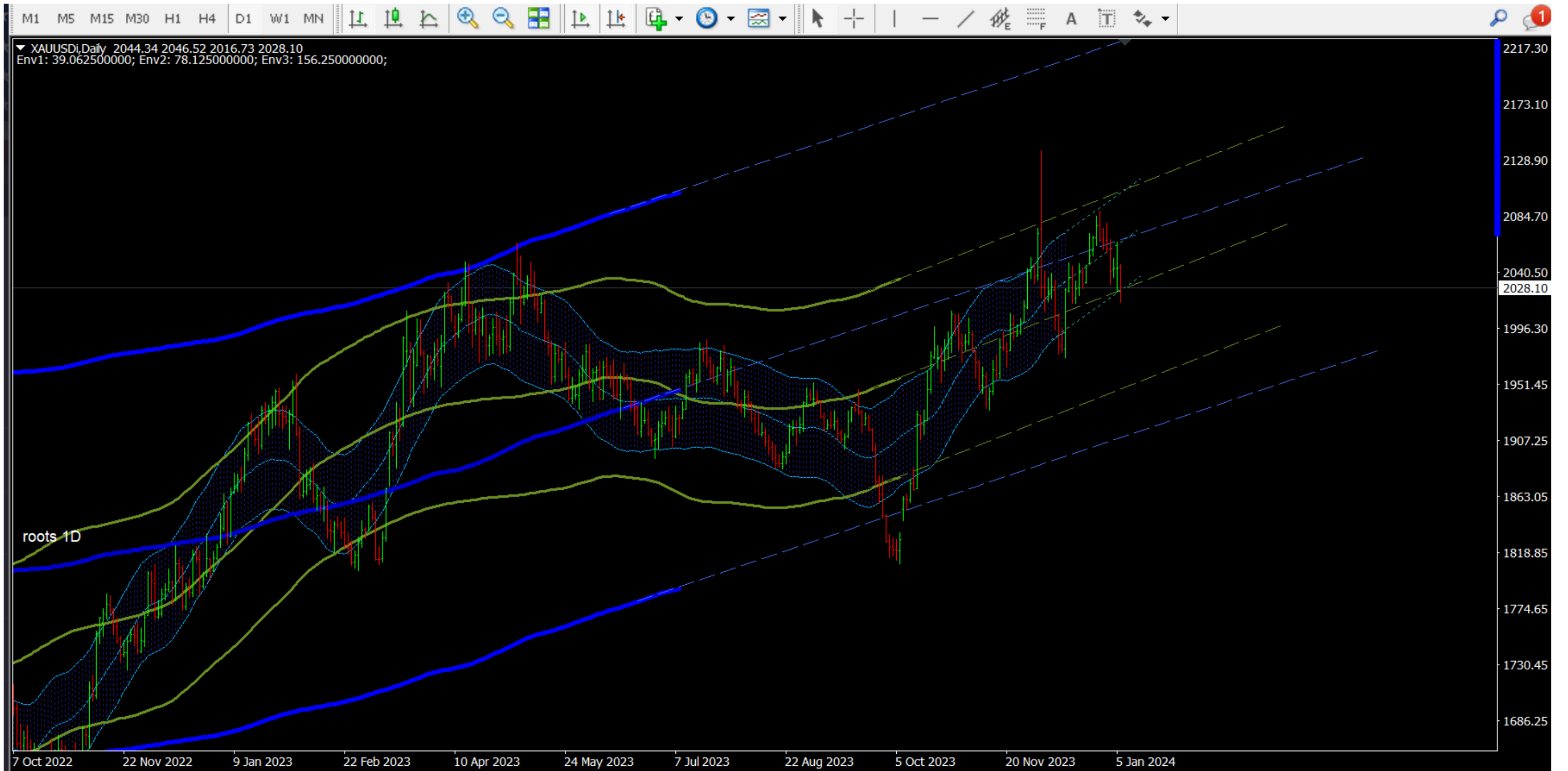
Upload Document(s):
PB_Cycles_mod.mq4

2024-01-05-extensions.png

Settings
Daily Chart attached
256 envelope shifted -128 with extension drawn based on (overlapping) last approx 16 bars and extended to 45 days in future from current time
128 envelope shifted - 64 with extension drawn based on (overlapping) last approx 8 bars and extended to 45 days in future from current time
32 envelope shifted -16 with extension drawn based on (overlapping) last approx 4 bars and extended to 45 days in future from current time

M1 M5 M15 M30 H1 H4 D1 W1 MN

XAUUSDi,Daily 2044.34 2046.52 2016.73 2028.06
Env1: 39.062500000; Env2: 78.125000000; Env3: 156.250000000;

2217.30
2173.10
2128.90
2084.70
2040.50
2028.06
1996.30
1951.45
1907.25
1863.05
1818.85
1774.65
1730.45
1686.25

roots 1D

7 Oct 2022   22 Nov 2022   9 Jan 2023   22 Feb 2023   10 Apr 2023   24 May 2023   7 Jul 2023   22 Aug 2023   5 Oct 2023   20 Nov 2023   5 Jan 2024

Custom Indicator - PB_Cycles_mod   ?   ✕

About Common Inputs Colors Visualization

Variable	Value
MA period envelope 1	32
MA shift envelope 1	-16
Octave value envelope 1	39.0625
MA period envelope 2	128
MA shift envelope 2	-64
Octave value envelope 2	78.125
MA period envelope 3	256
MA shift envelope 3	-128
Octave value envelope 3	156.25

Load
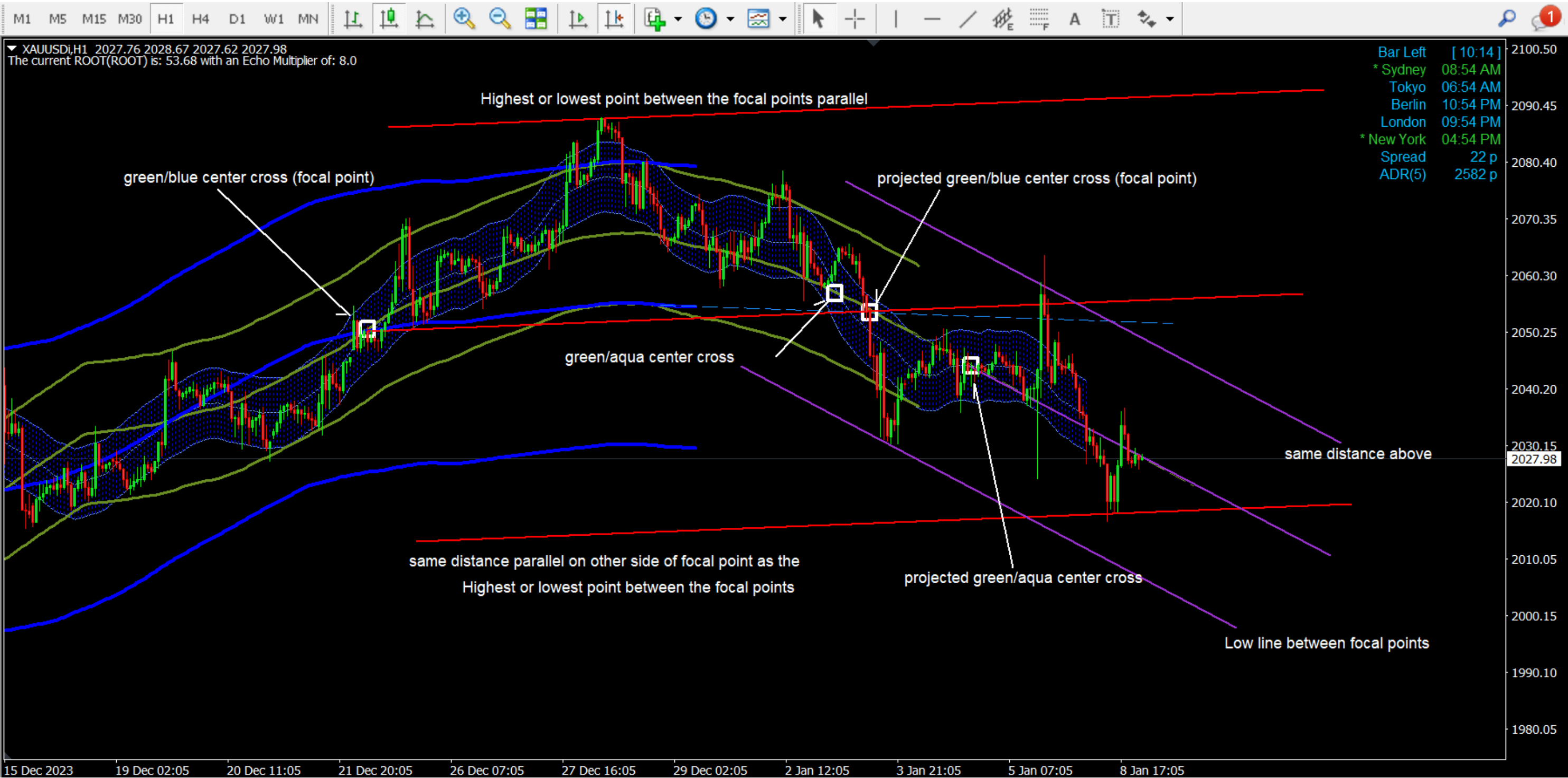Save

OK   Cancel   Reset

Edit
Delete

Close

also please think on this as an additional feature.

Once you have the ray extensions you can anticipate center
line crossings. I would like to be able to auto draw an equidistant channel with the center being the straight line connecting between the last cross and the next anticipated cross of the smallest 32 envelope center and the medium 128 envelope center (we will do this as well for the 128 and the 256 cross) with the width of the channel being equal to the 2x the high or low currently established above or below the line connecting those two focal points.

picture attached.

for clarity -
The CMA is simply a moving average set back 1/2 of its span. So a CMA64 is the average of the last 64 prices, offset by 32 bars.

To calculate a future position of the CMA is simple if the price moves from its current point to the final point in a straight line, but this is rarely the case.

When a new bar forms, the CMA64 can be calculated by adding the difference in value of the current bar and the removed bar (65 bars back) and dividing by 64.
(eg - current CMA64 = 4553, value of current bar is 4600, value of bar 65 bars back is 4400, new value of CMA64 is 4553 + ((4600-4400)/64) = 4556.125)

"256 envelope shifted -128 with extension drawn based on (overlapping) last approx 16 bars and extended to 45 days in future from current time"

How did we come up with 16 bars and 45 days in future?

I want to be able to select those values. Overlapping X bars. Extending X bars into the future.

For creating ray are you using last envelope price and price of envelope 16 bars before last?

Yes. Last envelope price and price of envelope X bars back is best I could come up with.
Or ...maybe a section of the envelope choosing beginning and end of section.... not sure that would offer anything that just using the end point does?
Unless you have a better suggestion for predicting the future ;)

some of these ideas are talked about here - fyi

https://www.forexfactory.com/thread/709088-analysis-and-trading-based-on-envelopes-waves-cycles?page=570

Thanks

for clarity -
So here is a pict of the 256 CMA (SMA shifted back 128 bars)
There are 4 vertical lines. Left to right 1, 2, 3, 4.
#1 is origin of Ray
#2 is end of current CMA256 and 2nd point of ray (predefined based on CMA setup)
#3 is 128 bars forward and current price action/time (predefined based on CMA setup)
#4 is look forward distance from current time

ideally for rays you could
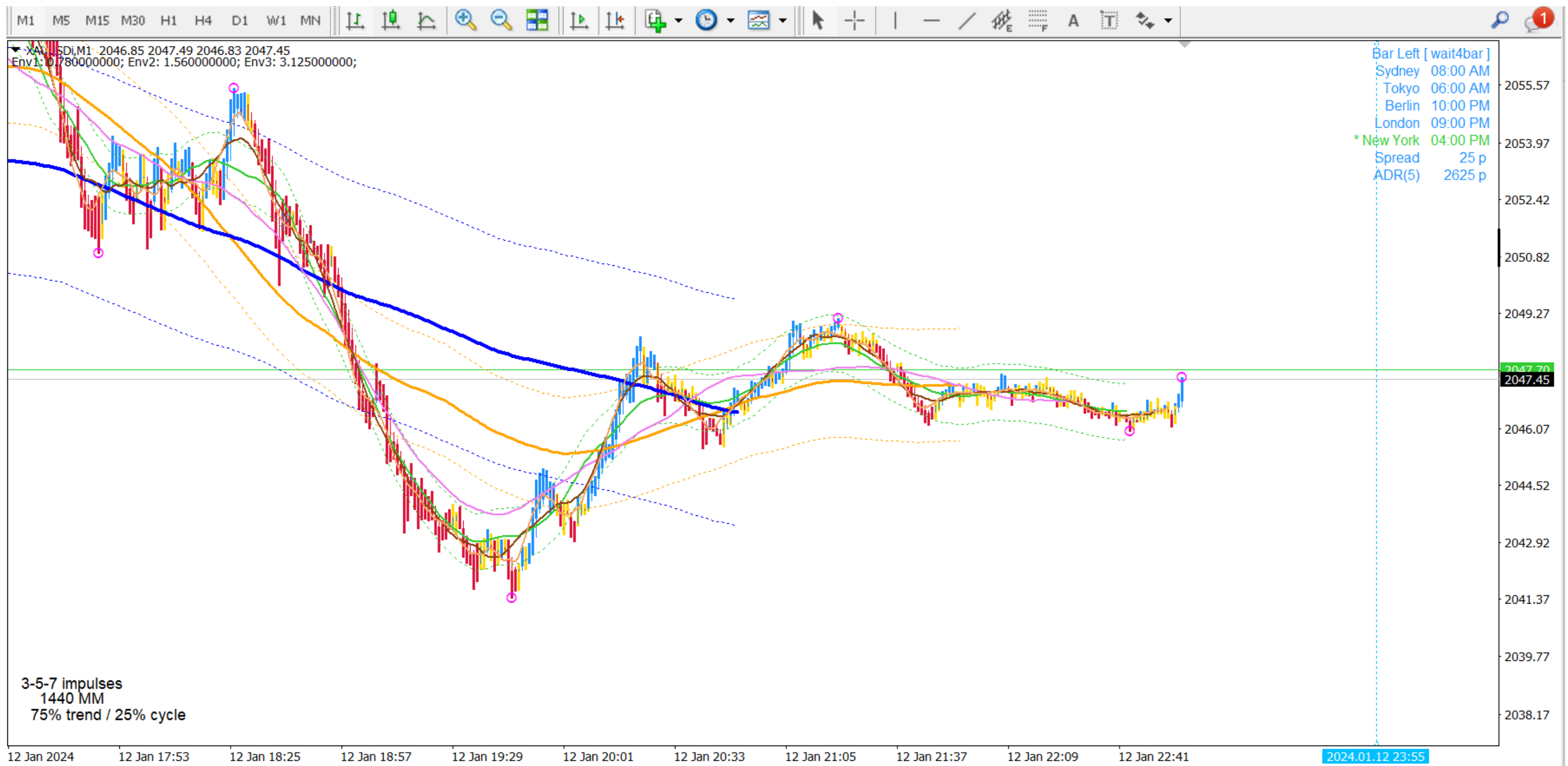select location of #1 and #4.
anchor entire unit of 4 points to move with the end of the CMA bar by bar
unanchor entire unit of 4 points to move freely by dragging back along the CMA for testing purposes
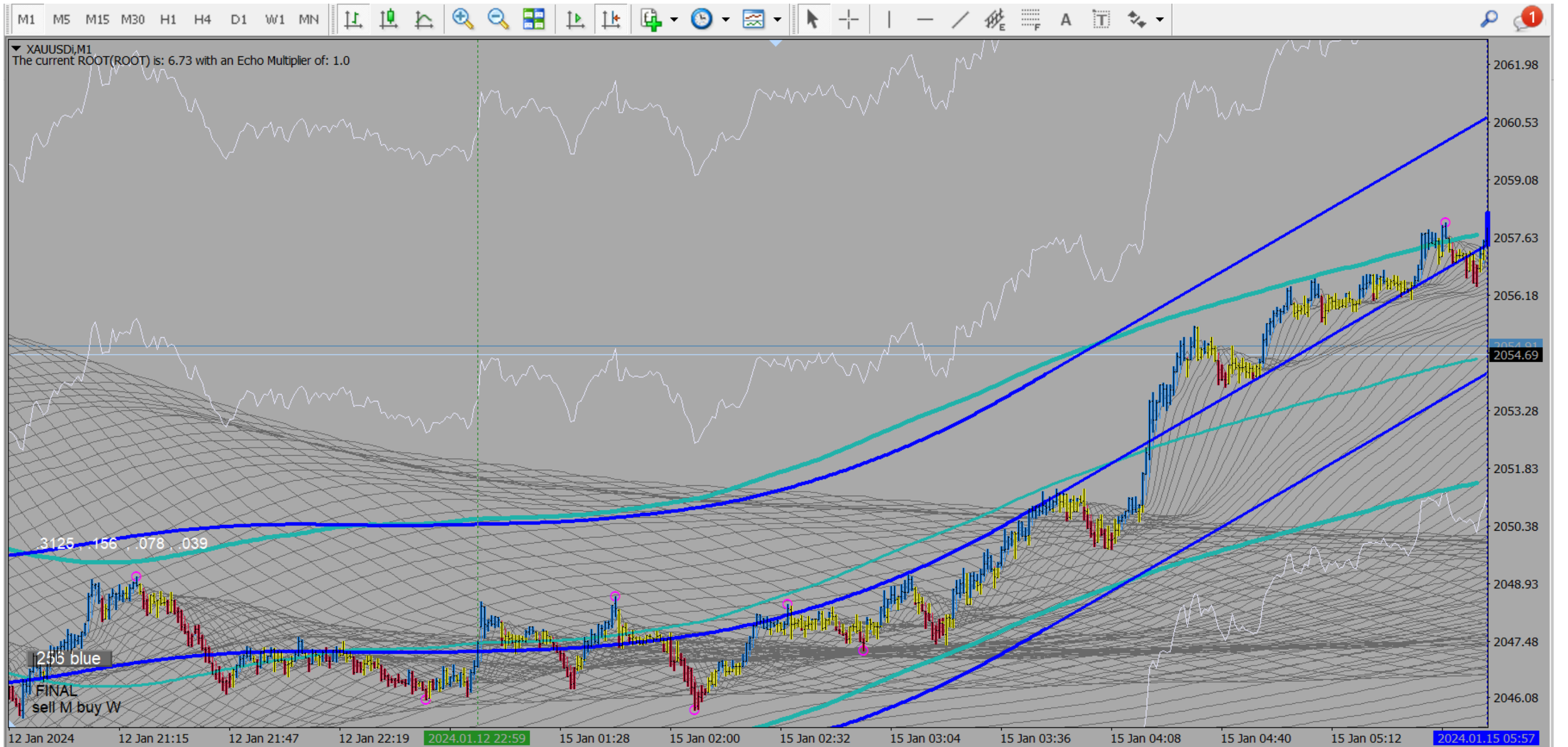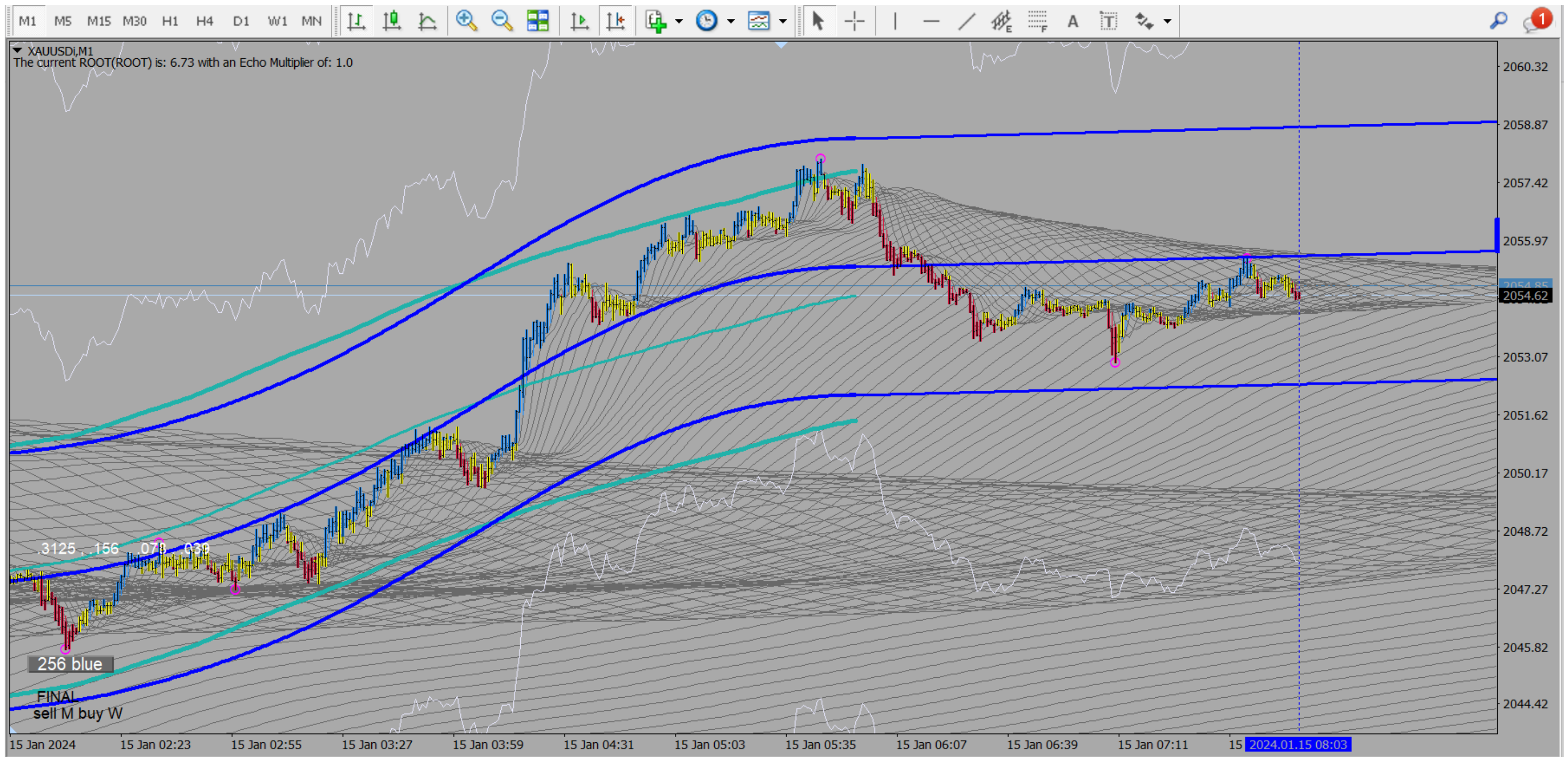need 3 units to extend 3 separate CMA envelopes

Don't worry about the future crosses/focal points aspect at this time. Let's just get some extension rays off of envelopes and we can take it from there.

attached a tma version with rays off the center/envelopes. This basically does what I am looking for if you can figure out how to change it to just sma not tma. TMA is overshooting then rewriting too much of the past because of the way it is calculated.

aqua is the SMA
dark blue is the TMA

XAUUSDi,M1
The current ROOT(ROOT) is: 6.73 with an Echo Multiplier of: 1.0

.3125 .156 .078 .039

256 blue

FINAL
sell M buy W

CMA_256_mod.mq4
11K