



**S-Trader**





## MAE | Moving Average Envelope

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## Description

Moving Average Envelopes are percentage-based envelopes set above and below a moving average. The moving average, which forms the base for this indicator, can be a simple, weighted, volume weighted, exponential or any other moving average. Each envelope is then set the same percentage above or below the moving average. This creates parallel bands that follow price action. With a moving average as the base, Moving Average Envelopes can be used as a trend following indicator. However, this indicator is not limited to just trend following. The envelopes can also be used to identify overbought and oversold levels when the trend is relatively flat.

## Formula

Step 1: Calculate the series MA using existing formulas;

Step 2: Actual bands calculation:

- Moving Average Envelope Top =  $MA * (1 + q\% \text{ Shift})$
- Moving Average Envelope Bottom =  $MA * (1 - q\% \text{ Shift})$

## Parameters

<b>MA Periods</b>	Any number of periods
<b>MA Type</b>	Any available moving average
<b>% Shift</b>	Any percentage for Up/Down shift



## Output value(s)

There are three output values resulting from the formula, the Moving Average Envelope Top, Main (or Middle) and Bottom.

## Plot

The plot is an overlay inside the price series panel.

## Quant Script™ Syntax

<b>Short Form</b>	<i>MAET</i> (Periods, MA Type, % Shift)
	<i>MAEM</i> (Periods, MA Type, % Shift)
	<i>MAEB</i> (Periods, MA Type, % Shift)
<b>Long Form</b>	<i>MovingAverageEnvelopeTop</i> (Periods, MA Type, % Shift)
	<i>MovingAverageEnvelopeMain</i> (Periods, MA Type, % Shift)
	<i>MovingAverageEnvelopeBottom</i> (Periods, MA Type, % Shift)



## Dialogs

### Chart Study Dialog

Indicator Parameters

Period

MaType

Shift

Symbol

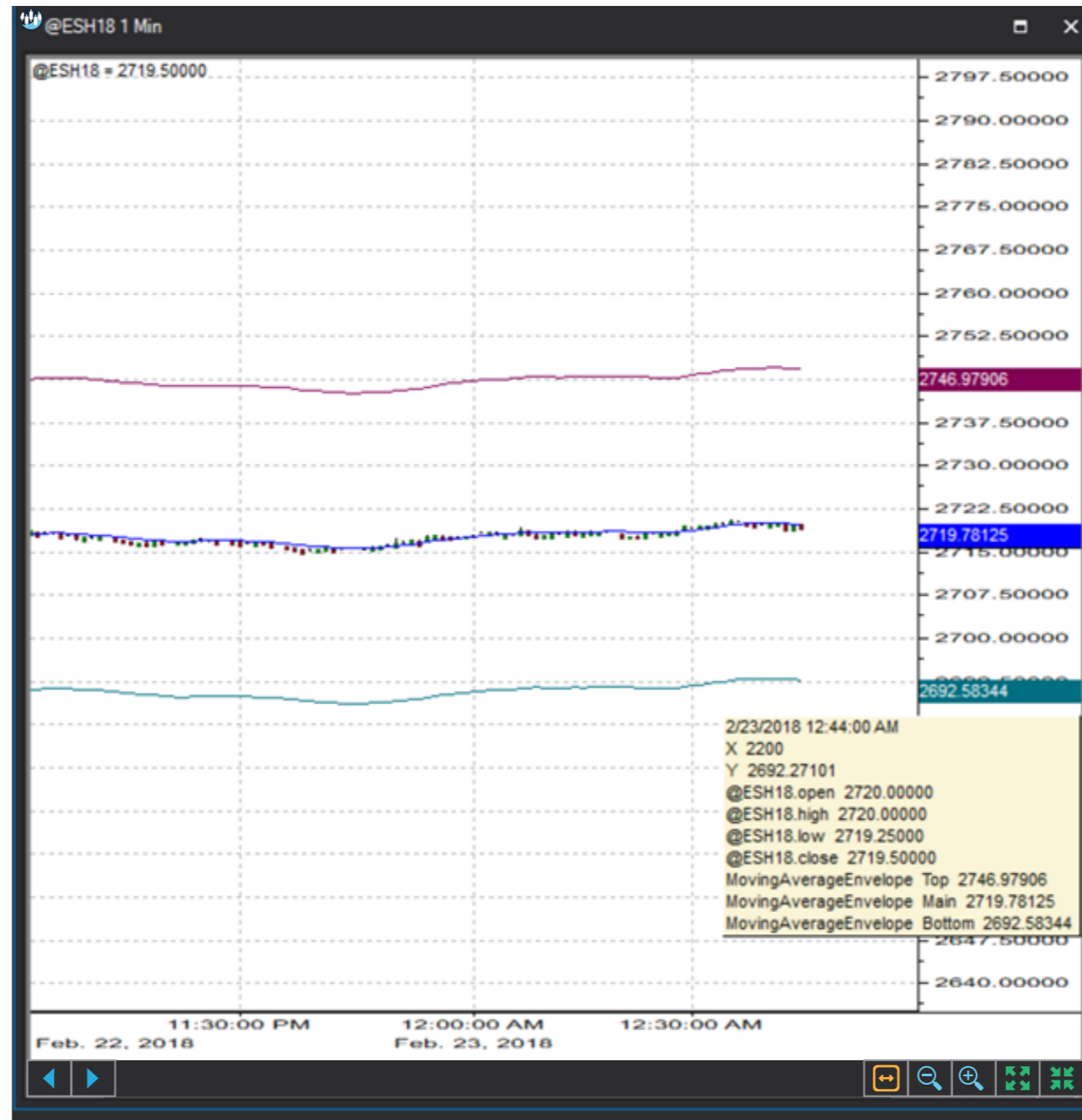
Series Configuration

Top	<input type="text" value="Line"/>	<input type="text" value="Solid"/>	<input type="text" value="1"/>	<input type="text" value=""/>
Main	<input type="text" value="Line"/>	<input type="text" value="Solid"/>	<input type="text" value="1"/>	<input type="text" value=""/>
Bottom	<input type="text" value="Line"/>	<input type="text" value="Solid"/>	<input type="text" value="1"/>	<input type="text" value=""/>

Save as Default Setting



## Sample Chart With Study





## Quant Script™ Wizard Study Dialog

The image shows two overlapping dialog boxes from the S-Trader platform. The top dialog is titled "Custom Study Wizard" and contains the following fields and controls:

- Save To Group: Default (dropdown)
- Custom Study Name: [Text Input]
- Password: [Text Input]
- Result: Line (dropdown), DashDotDot (dropdown), 2 (spin box), [Color Picker]
- Reverse\_Result: Line (dropdown), DashDot (dropdown), 2 (spin box), [Color Picker]
- Buttons: Add To New Panel (checked), Add New Variable, Edit Selected Variable
- Table with columns: Name, Description

The bottom dialog is titled "Add Variable" and contains the following fields and controls:

- Name: [Text Input]
- Description: [Text Input]
- Variable List (left): HighLowBandsTop, HLBB, HLBM, HLBT, KCB, KCM, KCT, KeltnerChannelBottom, KeltnerChannelMedian, KeltnerChannelTop, MAEB, MAEM, MAET, MovingAverageEnvelopeBottom, MovingAverageEnvelopeMain, MovingAverageEnvelopeTop, PNBB, PNBT
- Parameters (right): Period: 8 (spin box), MaType: Simple (dropdown), Shift: 1.00 (spin box)
- Button: Create Script Line
- Preview: MovingAverageEnvelopeBottom(8, Simple, 1.00)
- Buttons: OK, Cancel



## Quant Script™ Study Dialog

**Custom Study Editor**

Save To Group: 2\_ENVELOPES A 8.25

Custom Study Name: MAE

Password:

Result: Line | DashDotDot | 2 | █ █

Reverse\_Result: Line | DashDot | 2 | █ █

Formula Add To New Panel

```
SET RESULT = MAEB(8, SIMPLE, 1.00)
SET REVERSE_RESULT = MovingAverageEnvelopeBottom(8, SIMPLE, 1.00)

SET RESULT = MAEM(8, SIMPLE, 1.00)
SET REVERSE_RESULT = MovingAverageEnvelopeMain(8, SIMPLE, 1.00)

SET RESULT = MAET(8, SIMPLE, 1.00)
SET REVERSE_RESULT = MovingAverageEnvelopeTop(8, SIMPLE, 1.00)
```