



S-Trader





SEB | Standard Error Bands

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Description

The Standard Error Bands are very similar to the Bollinger Bands in that they plot a number of standard errors – as opposed to standard deviations – above and below any kind of moving average. To learn more about the Standard Error of a statistic and its connection to Standard Deviation, visit https://en.wikipedia.org/wiki/Standard_error.

Formula

Step 1: Calculate the series Moving Average and the Standard Error using existing formulas;

Step 2: Actual bands calculation:

- Standard Error Bands Top = Moving Average + n Standard Errors
- Standard Error Bands Bottom = Moving Average - n Standard Errors

Parameters

Source	Any price source (O, H, L, C, Vol, OI) or any other built-in or custom study
Periods	Any number of periods
MA Type	Any available moving average
# of SER	Any number of standard errors



Output value(s)

There are three output values resulting from the formula, the Standard Error Bands Top, Main (or Middle) and Bottom.

Plot

The plot is an overlay inside the price series panel.

Quant Script™ Syntax

Short Form	<i>SEBT</i> (Source, Periods, MA Type, StdErrs)
	<i>SEBM</i> (Source, Periods, MA Type, StdErrs)
	<i>SEBB</i> (Source, Periods, MA Type, StdErrs)
Long Form	<i>StandardErrorBandsTop</i> (Source, Periods, MA Type, StdErrs)
	<i>StandardErrorBandsMain</i> (Source, Periods, MA Type, StdErrs)
	<i>StandardErrorBandsBottom</i> (Source, Periods, MA Type, StdErrs)



Dialogs

Chart Study Dialog

Standart Error Bands [Close]

Indicator Parameters

Source: ESH8.close

Period: 8

MaType: Simple

Multiplier: 2.00000

Series Configuration

Band	Type	Style	Width	Color	Background
Top	Line	Solid	1	Red	White
Median	Line	Solid	1	Blue	White
Bottom	Line	Solid	1	Green	White

Save as Default Setting

[Add] [Cancel]



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 the 'Custom Study Wizard' and the bottom one is the 'Add Variable' dialog.

Custom Study Wizard

- Save To Group: Default
- Custom Study Name: [Empty text box]
- Password: [Empty text box]
- Result: Line, DashDotDot, 2, [Color selection]
- Reverse_Result: Line, DashDot, 2, [Color selection]
- Add To New Panel:
- Buttons: Add New Variable, Edit Selected Variable
- Table with columns: Name, Description

Add Variable

- Name: [Empty text box]
- Description: [Empty text box]
- Variable List: PNBB, PNBT, PrimeNumberBandsBottom, PrimeNumberBandsTop, SEBB, SEBM, SEBT, StandardErrorBandsBottom, StandardErrorBandsMiddle, StandardErrorBandsTop, STARCB, STARCM, STARCT, StollerAverageRangeChannelBottom, StollerAverageRangeChannelMedian, StollerAverageRangeChannelTop
- General Indicator Functions: [Expanded]
- Source: CLOSE
- Period: 8
- MaType: Simple
- Multiplier: 2.00
- Buttons: Create Script Line, OK, Cancel



Quant Script™ Study Dialog

Custom Study Editor

Save To Group: 2_ENVELOPES

Custom Study Name: SEBT

Password: [Empty]

Result: Line, DashDotDot, 2, [Teal]

Reverse_Result: Line, DashDot, 2, [Purple]

Formula

```
SET RESULT = SEBB(CLOSE, 8, SIMPLE, 2.00)  
SET REVERSE_RESULT = StandardErrorBandsBottom(CLOSE, 8, SIMPLE, 2.00)  
  
SET RESULT = SEBM(CLOSE, 8, SIMPLE, 2.00)  
SET REVERSE_RESULT = StandardErrorBandsMiddle(CLOSE, 8, SIMPLE, 2.00)  
  
SET RESULT = SEBT(CLOSE, 8, SIMPLE, 2.00)  
SET REVERSE_RESULT = StandardErrorBandsTop(CLOSE, 8, SIMPLE, 2.00)
```

Add To New Panel

OK Cancel