



S-Trader



2673

14.86

12.28

8.81

12.07

2.77

10.97

21.72

12.59

6.98

3.15

5.28

2.11

3.09

7.87

16.84

13.03

12.24

15.97

1.62

0.77

1.95

8.45

4.52

1.11

1.51

2.58

1.53

+0.52%

+0.18%

+0.18%

+0.18%

+0.40%

+0.40%

12734

2918

20580

28025

9487

10383

18775

791

2000

7149

2673



CAST | Correlation Analysis ST

Contents

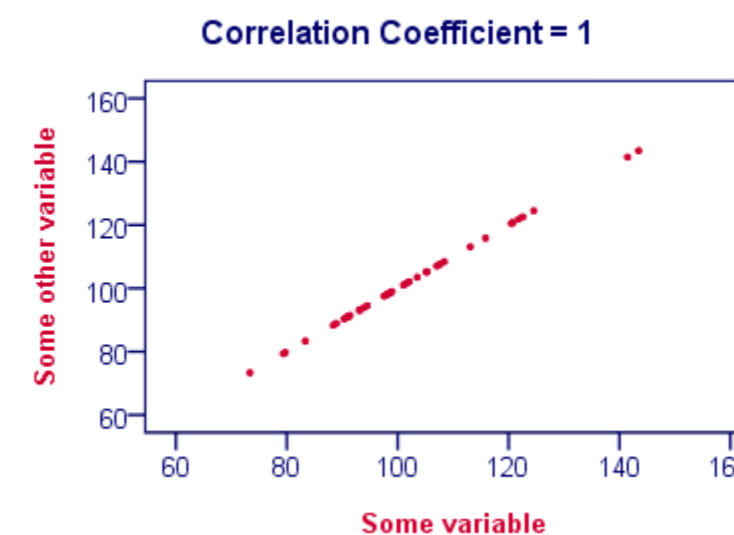
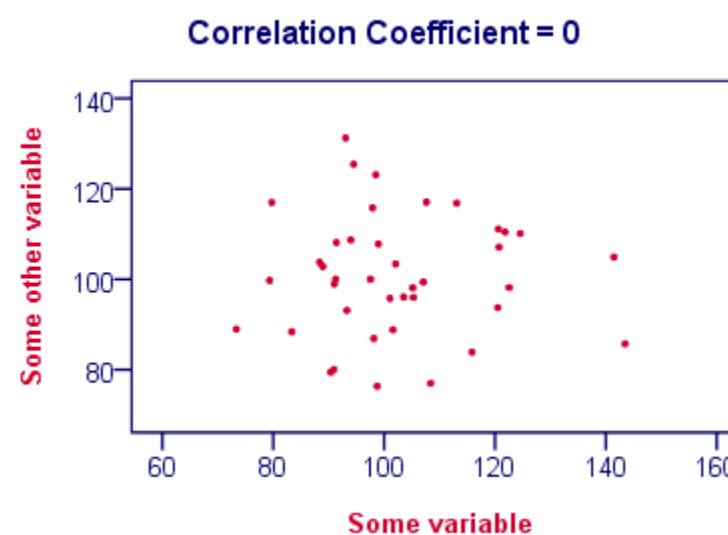
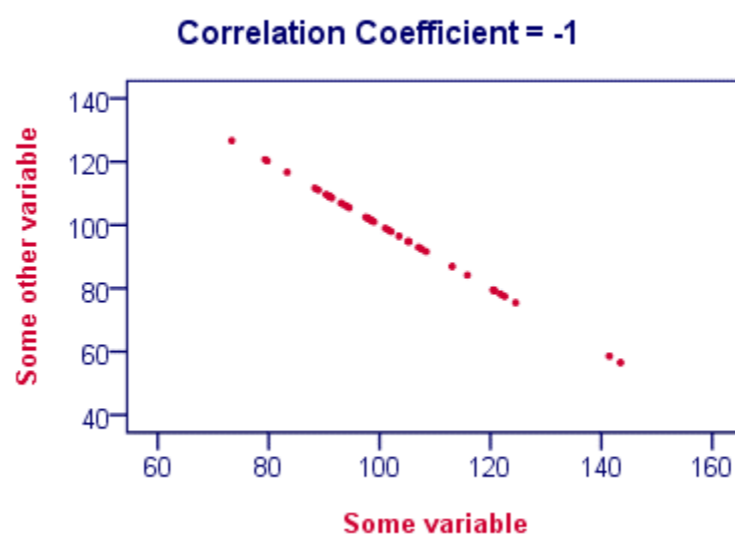
Description	3
Formula	4
Parameters	4
Output value(s)	5
Plot	5
Quant Script™ Syntax	5
Dialogs	6
Chart Study Dialog	6
Sample Chart With Study	7
Quant Script™ Wizard Study Dialog	8
Quant Script™ Study Dialog	8



Description

In statistics, the Pearson correlation coefficient, also referred to as the Pearson's r , Pearson product-moment correlation coefficient (PPMCC) or bivariate correlation, is a measure of the linear correlation between two variables X and Y . It has a value between $+1$ and -1 , where 1 is total positive linear correlation, 0 is no linear correlation, and -1 is total negative linear correlation. It is widely used in the sciences. It was developed by Karl Pearson from a related idea introduced by Francis Galton in the 1880s.

The Correlation Analysis ST function calculates the correlation coefficient between variables pertaining to two different symbols / instruments.





Formula

Step 1: Sample Series 1 and Series 2 for the appropriate Periods, with the appropriate offset;

Step 2: Calculate the appropriate moving averages MA(X) and MA(Y) using existing formulas;

Step 3: Calculate the appropriate Standard Deviations SDV(X) and SDV(Y) on the selected samples for the requested moving average type, using existing formulas;

Step 4: Calculate SUM = the sum of all terms $(X_i - X_{AVERAGE}) * (Y_i - Y_{AVERAGE})$

Step 5: Correlation Coefficient = $SUM / [(n-1) * SDV(X) * SDV(Y)]$

$$r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}}$$

Parameters

Source 1	Any price source (O, H, L, C, Vol, OI) for Symbol 1
MA Type 1	Any available moving average type
Source 2	Any price source (O, H, L, C, Vol, OI) for Symbol 2
MA Type 2	Any available moving average type
Periods	Any number of periods
Offset Source 2	Any number of periods



Output value(s)

There is one output value resulting from the formula, the Correlation Analysis.

Plot

The plot is in a separate panel at the bottom.

Quant Script Syntax

Short Form	<i>Not available</i>
Long Form	<i>Not available</i>



Dialogs

Chart Study Dialog

Indicator Parameters

Symbol1 ^EURUSD


Source1 close MA Type 1 Simple

Symbol2 ^USDCAD

Source2 high MA Type 2 Weighted

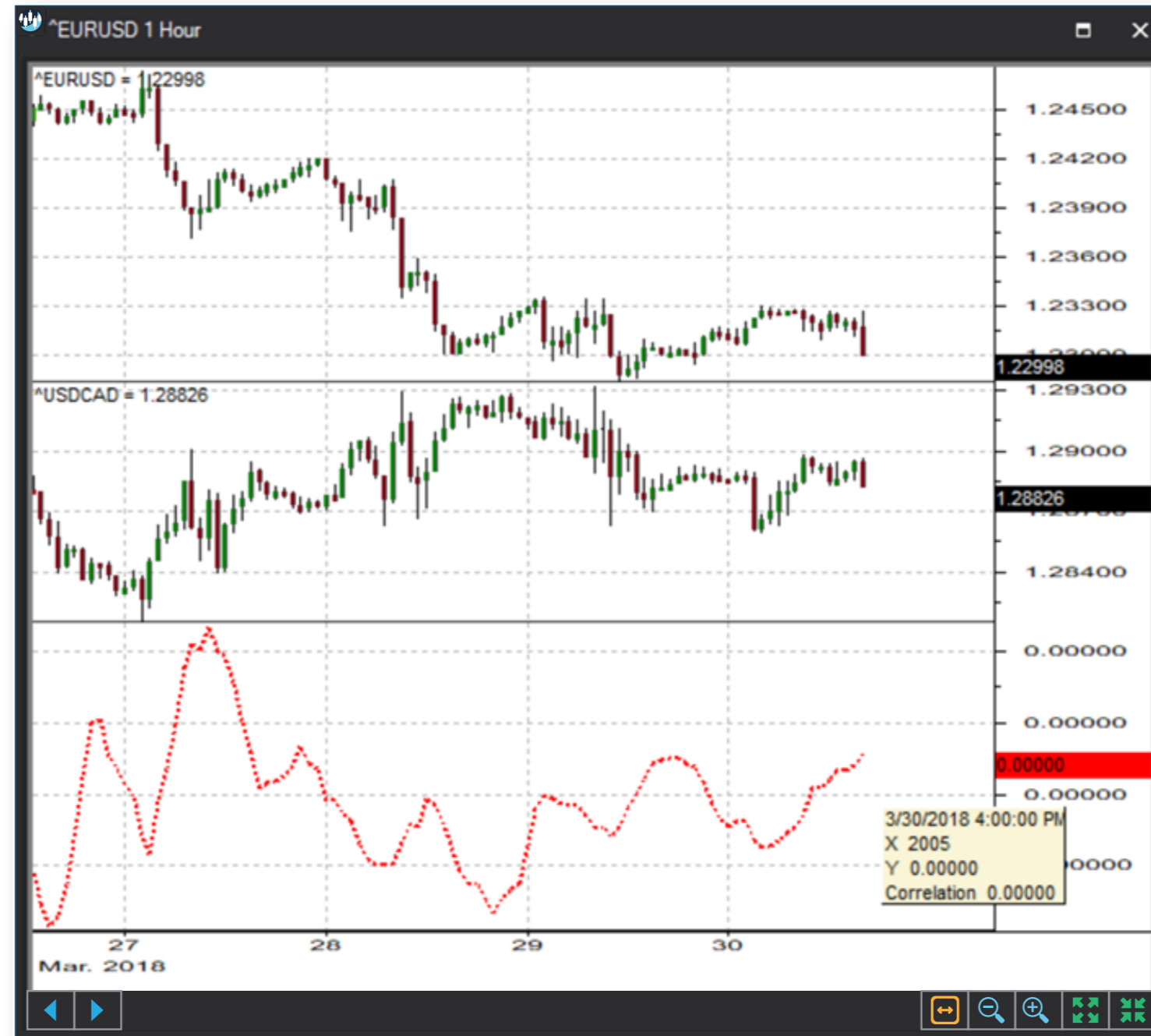
Periods 14 Series 2 Offset 3

Series Configuration

Main Line Dot 2 



Sample Chart With Study





Quant Script™ Wizard Study Dialog

NOT AVAILABLE

Quant Script™ Study Dialog

NOT AVAILABLE