

NDK_SSE

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- [C/C++](#)
- [.Net](#)

```
int __stdcall NDK_SSE(double * X,  
                    double * Y,  
                    size_t  N,  
                    double * retVal  
                    )
```

Calculates the sum of the squared errors of the prediction function.

Returns

status code of the operation

Return values

NDK_SUCCESS Operation successful

NDK_FAILED Operation unsuccessful. See [Macros](#) for full list.

See Also

[NDK_XCF\(\)](#)

Parameters

- [in] **X** is the original (eventual outcomes) time series sample data (a one dimensional array).
- [in] **Y** is the forecasted time series data (a one dimensional array).
- [in] **N** is the number of observations in X.
- [out] **retVal** is the calculated sum of squared errors.

Remarks

1. The time series is homogeneous or equally spaced.
2. The two time series must be identical in size.
3. A missing value (e.g. (x_k) or (\hat{x}_k)) in either time series will exclude the data point (x_k, \hat{x}_k) from the SSE.
4. The sum of the squared errors, (SSE) , is defined as follows:

$$\mathrm{SSE} = \sum_{i=1}^N \left(x_i - \hat{x}_i \right)^2,$$

where:

- (x_i) is the actual observations time series.
- (\hat{x}_i) is the estimated or forecasted time series.

Requirements

Header	SFSDK.H
Library	SFSDK.LIB
DLL	SFSDK.DLL

Examples

```
int NDK_SSE(double[] pData1,  
            double[] pData2,  
            UIntPtr nSize,  
            ref double retVal  
            )
```

Namespace: NumXLAPI

Class: SFSDK

Scope: Public

Lifetime: Static

Calculates the sum of the squared errors of the prediction function.

Return Value

a value from [NDK_RETCODE](#) enumeration for the status of the call.

NDK_SUCCESS operation successful

Error Error Code

Parameters

[in] **pData1** is the original (eventual outcomes) time series sample data (a one dimensional array).

[in] **pData2** is the forecasted time series data (a one dimensional array).

[in] **nSize** is the number of observations in pData1.

[out] **retVal** is the calculated sum of squared errors.

Remarks

1. The time series is homogeneous or equally spaced.
2. The two time series must be identical in size.
3. A missing value (e.g. x_k or \hat{x}_k) in either time series will exclude the data point (x_k, \hat{x}_k) from the SSE.
4. The sum of the squared errors, SSE , is defined as follows:

$$\sqrt{\mathrm{SSE}} = \sqrt{\sum_{i=1}^N \left(x_i - \hat{x}_i\right)^2}$$
,

where:

- $\{x_i\}$ is the actual observations time series.
- $\{\hat{x}_i\}$ is the estimated or forecasted time series.

Exceptions

Exception Type	Condition
None	N/A

Requirements

Namespace	NumXLAPI
Class	SFSDK
Scope	Public
Lifetime	Static
Package	NumXLAPI.DLL

Examples

References

Hull, John C.; [Options, Futures and Other Derivatives](#) Financial Times/ Prentice Hall (2011), ISBN 978-0132777421

See Also

[template("related")]
