

# NDK\_DETREND

Last Modified on 04/21/2016 12:40 pm CDT

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

```
int __stdcall NDK_DETREND(double *X,  
                          size_t  N,  
                          WORD    polyOrder  
                          )
```

Detrends a time series using a regression of y against a polynomial time trend of order p.

## Returns

status code of the operation

## Return values

**NDK\_SUCCESS** Operation successful

**NDK\_FAILED** Operation unsuccessful. See [Macros](#) for full list.

## Parameters

[in, out] **X** is the univariate time series data (a one dimensional array).

[in] **N** is the number of observations in X.

[in] **polyOrder** is the order of the polynomial time trend: 0. subtracts mean (default)

Order	Description
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0	subtracts mean (default)
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1	constant plus trend model
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2	constant plus trend and squared trend model
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## Remarks

1. The time series is homogeneous or equally spaced.
2. The time series may include missing values (NaN) at either end.

## Requirements

<b>Header</b>	SFSDK.H
<b>Library</b>	SFSDK.LIB
<b>DLL</b>	SFSDK.DLL

## Examples

```
int NDK_DETRENDD(double[] pData,  
                UIntPtr nSize,  
                short polyOrder  
                )
```

**Namespace:** NumXLAPI  
**Class:** SFSDK  
**Scope:** Public  
**Lifetime:** Static

Detrends a time series using a regression of y against a polynomial time trend of order p.

### Returns

status code of the operation

### Return values

**NDK\_SUCCESS** Operation successful

**NDK\_FAILED** Operation unsuccessful. See [Macros](#) for full list.

### Parameters

[in,out] **pData** is the univariate time series data (a one dimensional array).

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

[in] **polyOrder** is the order of the polynomial time trend: 0. subtracts mean (default)

#### Order Description

0	subtracts mean (default)
1	constant plus trend model
2	constant plus trend and squared trend model

### Remarks

1. The time series is homogeneous or equally spaced.
2. The time series may include missing values (NaN) at either end.

### Exceptions

Exception Type	Condition
None	N/A

### Requirements

<b>Namespace</b>	NumXLAPI
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<b>Class</b>	SFSDK
<b>Scope</b>	Public
<b>Lifetime</b>	Static
<b>Package</b>	NumXLAPI.DLL

### Examples

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### References

Hamilton, J .D.; [Time Series Analysis](#) , Princeton University Press (1994), ISBN 0-691-04289-6

Tsay, Ruey S.; [Analysis of Financial Time Series](#) John Wiley & SONS. (2005), ISBN 0-471-690740

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### See Also

[template("related")]

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