

# NDK\_PCR\_FORE

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

```
int __stdcall NDK_PCR_FORE ( double ** X,  
                             size_t   nXSize,  
                             size_t   nXVars,  
                             LPBYTE   mask,  
                             size_t   nMaskLen,  
                             double *  Y,  
                             size_t   nYSize,  
                             double   intercept,  
                             double *  target,  
                             double   alpha,  
                             WORD      nRetType,  
                             double *  retVal  
                             )
```

Calculates the model's estimated values, std. errors and related statistics.

## Returns

status code of the operation

## Return values

**NDK\_SUCCESS** Operation successful

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

## Parameters

- [in] **X** is the independent variables data matrix, such that each column represents one variable
- [in] **nXSize** is the number of observations (i.e. rows) in X
- [in] **nXVars** is the number of variables (i.e. columns) in X
- [in] **mask** is the boolean array to select a subset of the input variables in X. If missing (i.e. NULL), all variables in X are included.
- [in] **nMaskLen** is the number of elements in mask
- [in] **Y** is the response or the dependent variable data array (one dimensional array)
- [in] **nYSize** is the number of elements in Y
- [in] **intercept** is the constant or the intercept value to fix (e.g. zero). If missing (NaN), an intercept will not be fixed and is computed normally

- [in] **target** is the value of the explanatory variables (a one dimensional array)
- [in] **alpha** is the statistical significance of the test (i.e. alpha)
- [in] **nRetType** is a switch to select the return output (1 = forecast (default), 2 = error, 3 = upper limit, 4 = lower limit).
- [out] **retVal** is the calculated forecast value or statistics.

### Remarks

1. The underlying model is described [here](#).
2. The sample data may include missing values.
3. Each column in the input matrix corresponds to a separate variable.
4. Each row in the input matrix corresponds to an observation.
5. Observations (i.e. row) with missing values in X or Y are removed.
6. The number of rows of the response variable (Y) must be equal to the number of rows of the explanatory variables (X).
7. The MLR\_FORE function is available starting with version 1.60 APACHE.

### Requirements

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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")]