

## Wave

Revision: 10 (last commit)

Generated by Doxygen 1.8.1.2

Mon Dec 10 2012 16:25:19

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## 1 Data Type Index

### 1.1 Data Types List

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## 2 File Index

### 2.1 File List

Here is a list of all files with brief descriptions:

[tempassembled.f90](#)

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## 3 Data Type Documentation

### 3.1 nwtc\_aero::aerodata Type Reference

#### Public Attributes

- real(reki) [alfastal](#)
- real(reki) [aod](#)
- real(reki) [aol](#)
- real(reki) [cd0](#)
- real(reki) [cna](#)
- real(reki) [cns](#)
- real(reki) [cnsi](#)
- real(reki) [cl](#)
- real(reki) [cd](#)
- real(reki) [cm](#)
- real(reki) [cpmin](#)
- real(reki) [ftb](#)
- real(reki) [ftbc](#)

#### 3.1.1 Detailed Description

Definition at line 5977 of file tempassembled.f90.

#### 3.1.2 Member Data Documentation

##### 3.1.2.1 real(reki) nwtc\_aero::aerodata::alfastal

Definition at line 5978 of file tempassembled.f90.

##### 3.1.2.2 real(reki) nwtc\_aero::aerodata::aod

Definition at line 5979 of file tempassembled.f90.

##### 3.1.2.3 real(reki) nwtc\_aero::aerodata::aol

Definition at line 5980 of file tempassembled.f90.

##### 3.1.2.4 real(reki) nwtc\_aero::aerodata::cd

Definition at line 5986 of file tempassembled.f90.

### 3.1.2.5 real(reki) nwtc\_aero::aerodata::cd0

Definition at line 5981 of file tempassembled.f90.

### 3.1.2.6 real(reki) nwtc\_aero::aerodata::cl

Definition at line 5985 of file tempassembled.f90.

### 3.1.2.7 real(reki) nwtc\_aero::aerodata::cm

Definition at line 5987 of file tempassembled.f90.

### 3.1.2.8 real(reki) nwtc\_aero::aerodata::cna

Definition at line 5982 of file tempassembled.f90.

### 3.1.2.9 real(reki) nwtc\_aero::aerodata::cns

Definition at line 5983 of file tempassembled.f90.

### 3.1.2.10 real(reki) nwtc\_aero::aerodata::cnsl

Definition at line 5984 of file tempassembled.f90.

### 3.1.2.11 real(reki) nwtc\_aero::aerodata::cpmin

Definition at line 5988 of file tempassembled.f90.

### 3.1.2.12 real(reki) nwtc\_aero::aerodata::ftb

Definition at line 5989 of file tempassembled.f90.

### 3.1.2.13 real(reki) nwtc\_aero::aerodata::ftbc

Definition at line 5990 of file tempassembled.f90.

The documentation for this type was generated from the following file:

- [tempassembled.f90](#)

## 3.2 nwtc\_aero::aerortable Type Reference

### Public Attributes

- real(reki) [alfastal](#)
- real(reki) [aod](#)
- real(reki) [aol](#)
- real(reki) [cd0](#)
- real(reki) [cna](#)
- real(reki) [cns](#)
- real(reki) [cnsl](#)
- real(reki) [re](#)
- real(reki) [ctrl](#)
- integer [ind](#) = 0
- integer [numalf](#)



- `real(reki), dimension(:), allocatable alpha`
- `real(reki), dimension(:), allocatable cl`
- `real(reki), dimension(:), allocatable cd`
- `real(reki), dimension(:), allocatable cm`
- `real(reki), dimension(:), allocatable cpm`
- `real(reki), dimension(:), allocatable ftb`
- `real(reki), dimension(:), allocatable ftbc`

### 3.2.1 Detailed Description

Definition at line 5993 of file tempassembled.f90.

### 3.2.2 Member Data Documentation

#### 3.2.2.1 `real(reki) nwtc_aero::aerortable::alfastal`

Definition at line 5994 of file tempassembled.f90.

#### 3.2.2.2 `real(reki), dimension (:), allocatable nwtc_aero::aerortable::alpha`

Definition at line 6005 of file tempassembled.f90.

#### 3.2.2.3 `real(reki) nwtc_aero::aerortable::aod`

Definition at line 5995 of file tempassembled.f90.

#### 3.2.2.4 `real(reki) nwtc_aero::aerortable::aol`

Definition at line 5996 of file tempassembled.f90.

#### 3.2.2.5 `real(reki), dimension (:), allocatable nwtc_aero::aerortable::cd`

Definition at line 6007 of file tempassembled.f90.

#### 3.2.2.6 `real(reki) nwtc_aero::aerortable::cd0`

Definition at line 5997 of file tempassembled.f90.

#### 3.2.2.7 `real(reki), dimension (:), allocatable nwtc_aero::aerortable::cl`

Definition at line 6006 of file tempassembled.f90.

#### 3.2.2.8 `real(reki), dimension (:), allocatable nwtc_aero::aerortable::cm`

Definition at line 6008 of file tempassembled.f90.

**3.2.2.9 real(reki) nwtc\_aero::aerortable::cna**

Definition at line 5998 of file tempassembled.f90.

**3.2.2.10 real(reki) nwtc\_aero::aerortable::cns**

Definition at line 5999 of file tempassembled.f90.

**3.2.2.11 real(reki) nwtc\_aero::aerortable::cnsl**

Definition at line 6000 of file tempassembled.f90.

**3.2.2.12 real(reki), dimension (:), allocatable nwtc\_aero::aerortable::cpmin**

Definition at line 6009 of file tempassembled.f90.

**3.2.2.13 real(reki) nwtc\_aero::aerortable::ctrl**

Definition at line 6002 of file tempassembled.f90.

**3.2.2.14 real(reki), dimension (:), allocatable nwtc\_aero::aerortable::ftb**

Definition at line 6010 of file tempassembled.f90.

**3.2.2.15 real(reki), dimension (:), allocatable nwtc\_aero::aerortable::ftbc**

Definition at line 6011 of file tempassembled.f90.

**3.2.2.16 integer nwtc\_aero::aerortable::ind = 0**

Definition at line 6003 of file tempassembled.f90.

**3.2.2.17 integer nwtc\_aero::aerortable::numalf**

Definition at line 6004 of file tempassembled.f90.

**3.2.2.18 real(reki) nwtc\_aero::aerortable::re**

Definition at line 6001 of file tempassembled.f90.

The documentation for this type was generated from the following file:

- [tempassembled.f90](#)

**3.3 nwtc\_aero::alfindx Type Reference****Public Attributes**

- integer [numbld](#)
- integer [numelm](#)
- integer, dimension(:, :),  
allocatable [ind](#)

**3.3.1 Detailed Description**

Definition at line 6014 of file tempassembled.f90.

### 3.3.2 Member Data Documentation

#### 3.3.2.1 integer, dimension (:,:), allocatable nwtc\_aero::alfindx::ind

Definition at line 6017 of file tempassembled.f90.

#### 3.3.2.2 integer nwtc\_aero::alfindx::numbld

Definition at line 6015 of file tempassembled.f90.

#### 3.3.2.3 integer nwtc\_aero::alfindx::numelm

Definition at line 6016 of file tempassembled.f90.

The documentation for this type was generated from the following file:

- [tempassembled.f90](#)

## 3.4 nwtc\_io::allocary Interface Reference

### Public Member Functions

- subroutine [allcary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allcary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allcary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [alliary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [alliary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [alliary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [alllary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [alllary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [alllary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [allrary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allrary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allrary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [allrary4](#) (Ary, AryDim1, AryDim2, AryDim3, AryDim4, Descr, ErrStat)
- subroutine [allcary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allcary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allcary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [alliary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [alliary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [alliary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [alllary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [alllary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [alllary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [allrary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allrary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allrary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [allrary4](#) (Ary, AryDim1, AryDim2, AryDim3, AryDim4, Descr, ErrStat)
- subroutine [allcary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allcary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allcary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [alliary1](#) (Ary, AryDim, Descr, ErrStat)

- subroutine [allary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [allary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [allary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [allary4](#) (Ary, AryDim1, AryDim2, AryDim3, AryDim4, Descr, ErrStat)

#### 3.4.1 Detailed Description

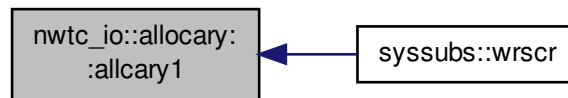
Definition at line 1043 of file tempassembled.f90.

#### 3.4.2 Member Function/Subroutine Documentation

**3.4.2.1** subroutine nwtc\_io::allocary::allcary1 ( character(\*), dimension (:), allocatable Ary, integer, intent(in) AryDim, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 1160 of file tempassembled.f90.

Here is the caller graph for this function:



**3.4.2.2** subroutine nwtc\_io::allocary::allcary1 ( character(\*), dimension (:), allocatable Ary, integer, intent(in) AryDim, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 15030 of file tempassembled.f90.

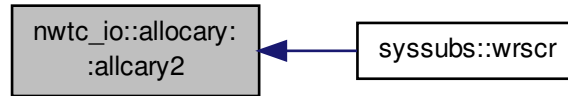
**3.4.2.3** subroutine nwtc\_io::allocary::allcary1 ( character(\*), dimension (:), allocatable Ary, integer, intent(in) AryDim, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 28900 of file tempassembled.f90.

**3.4.2.4** subroutine nwtc\_io::allocary::allcary2 ( character(\*), dimension (:,:), allocatable Ary, integer, intent(in) AryDim1, integer, intent(in) AryDim2, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 1193 of file tempassembled.f90.

Here is the caller graph for this function:



**3.4.2.5** subroutine `nwtc_io::allocary::allcary2` ( `character(*)`, `dimension (:, :)`, allocatable `Ary`, integer, intent(in) `AryDim1`, integer, intent(in) `AryDim2`, `character(*)`, intent(in) `Descr`, integer, intent(out), optional `ErrStat` )

Definition at line 15063 of file `tempassembled.f90`.

**3.4.2.6** subroutine `nwtc_io::allocary::allcary2` ( `character(*)`, `dimension (:, :)`, allocatable `Ary`, integer, intent(in) `AryDim1`, integer, intent(in) `AryDim2`, `character(*)`, intent(in) `Descr`, integer, intent(out), optional `ErrStat` )

Definition at line 28933 of file `tempassembled.f90`.

**3.4.2.7** subroutine `nwtc_io::allocary::allcary3` ( `character(*)`, `dimension (:, :, :)`, allocatable `Ary`, integer, intent(in) `AryDim1`, integer, intent(in) `AryDim2`, integer, intent(in) `AryDim3`, `character(*)`, intent(in) `Descr`, integer, intent(out), optional `ErrStat` )

Definition at line 15096 of file `tempassembled.f90`.

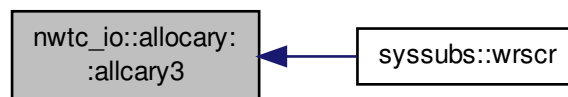
**3.4.2.8** subroutine `nwtc_io::allocary::allcary3` ( `character(*)`, `dimension (:, :, :)`, allocatable `Ary`, integer, intent(in) `AryDim1`, integer, intent(in) `AryDim2`, integer, intent(in) `AryDim3`, `character(*)`, intent(in) `Descr`, integer, intent(out), optional `ErrStat` )

Definition at line 28966 of file `tempassembled.f90`.

**3.4.2.9** subroutine `nwtc_io::allocary::allcary3` ( `character(*)`, `dimension (:, :, :)`, allocatable `Ary`, integer, intent(in) `AryDim1`, integer, intent(in) `AryDim2`, integer, intent(in) `AryDim3`, `character(*)`, intent(in) `Descr`, integer, intent(out), optional `ErrStat` )

Definition at line 1226 of file `tempassembled.f90`.

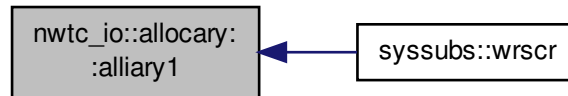
Here is the caller graph for this function:



3.4.2.10 subroutine nwtc\_io::allocary::alliary1 ( integer, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1262 of file tempassembled.f90.

Here is the caller graph for this function:



3.4.2.11 subroutine nwtc\_io::allocary::alliary1 ( integer, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15132 of file tempassembled.f90.

3.4.2.12 subroutine nwtc\_io::allocary::alliary1 ( integer, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29002 of file tempassembled.f90.

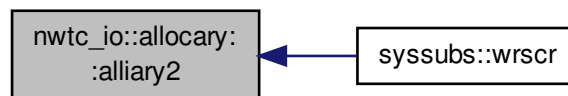
3.4.2.13 subroutine nwtc\_io::allocary::alliary2 ( integer, dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15164 of file tempassembled.f90.

3.4.2.14 subroutine nwtc\_io::allocary::alliary2 ( integer, dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1294 of file tempassembled.f90.

Here is the caller graph for this function:



3.4.2.15 subroutine nwtc\_io::allocary::allary2 ( integer, dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29034 of file tempassembled.f90.

3.4.2.16 subroutine nwtc\_io::allocary::allary3 ( integer, dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29067 of file tempassembled.f90.

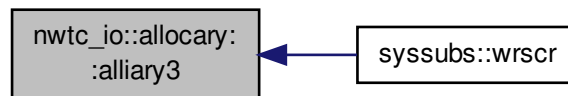
3.4.2.17 subroutine nwtc\_io::allocary::allary3 ( integer, dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15197 of file tempassembled.f90.

3.4.2.18 subroutine nwtc\_io::allocary::allary3 ( integer, dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1327 of file tempassembled.f90.

Here is the caller graph for this function:



3.4.2.19 subroutine nwtc\_io::allocary::allary1 ( logical, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29102 of file tempassembled.f90.

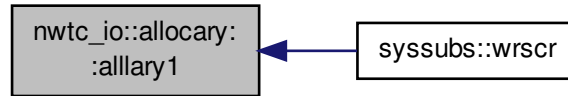
3.4.2.20 subroutine nwtc\_io::allocary::allary1 ( logical, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15232 of file tempassembled.f90.

3.4.2.21 subroutine nwtc\_io::allocary::allary1 ( logical, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1362 of file tempassembled.f90.

Here is the caller graph for this function:



3.4.2.22 subroutine `nwtc_io::allocary::allary2` ( `logical`, `dimension (:,:)`, `allocatable Ary`, `integer`, `intent(in) AryDim1`, `integer`, `intent(in) AryDim2`, `character(*)`, `intent(in) Descr`, `integer`, `intent(out)`, `optional ErrStat` )

Definition at line 29136 of file `tempassembled.f90`.

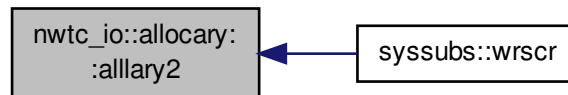
3.4.2.23 subroutine `nwtc_io::allocary::allary2` ( `logical`, `dimension (:,:)`, `allocatable Ary`, `integer`, `intent(in) AryDim1`, `integer`, `intent(in) AryDim2`, `character(*)`, `intent(in) Descr`, `integer`, `intent(out)`, `optional ErrStat` )

Definition at line 15266 of file `tempassembled.f90`.

3.4.2.24 subroutine `nwtc_io::allocary::allary2` ( `logical`, `dimension (:,:)`, `allocatable Ary`, `integer`, `intent(in) AryDim1`, `integer`, `intent(in) AryDim2`, `character(*)`, `intent(in) Descr`, `integer`, `intent(out)`, `optional ErrStat` )

Definition at line 1396 of file `tempassembled.f90`.

Here is the caller graph for this function:



3.4.2.25 subroutine `nwtc_io::allocary::allary3` ( `logical`, `dimension (:,::)`, `allocatable Ary`, `integer`, `intent(in) AryDim1`, `integer`, `intent(in) AryDim2`, `integer`, `intent(in) AryDim3`, `character(*)`, `intent(in) Descr`, `integer`, `intent(out)`, `optional ErrStat` )

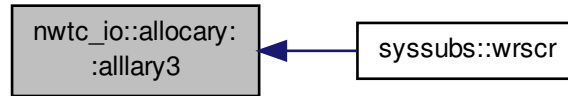
Definition at line 29171 of file `tempassembled.f90`.

3.4.2.26 subroutine `nwtc_io::allocary::allary3` ( `logical`, `dimension (:,::)`, `allocatable Ary`, `integer`, `intent(in) AryDim1`, `integer`, `intent(in) AryDim2`, `integer`, `intent(in) AryDim3`, `character(*)`, `intent(in) Descr`, `integer`, `intent(out)`, `optional ErrStat` )

Definition at line 1431 of file `tempassembled.f90`.



Here is the caller graph for this function:



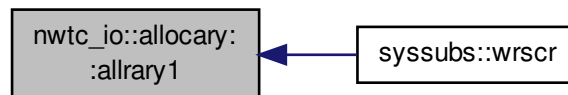
**3.4.2.27** subroutine `nwtc_io::allocary::allary3` ( *logical*, dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15301 of file `tempassembled.f90`.

**3.4.2.28** subroutine `nwtc_io::allocary::allary1` ( *real(reki)*, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1467 of file `tempassembled.f90`.

Here is the caller graph for this function:



**3.4.2.29** subroutine `nwtc_io::allocary::allary1` ( *real(reki)*, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29207 of file `tempassembled.f90`.

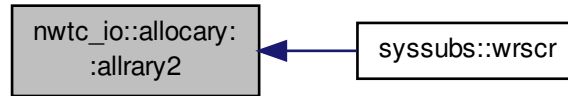
**3.4.2.30** subroutine `nwtc_io::allocary::allary1` ( *real(reki)*, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15337 of file `tempassembled.f90`.

**3.4.2.31** subroutine `nwtc_io::allocary::allary2` ( *real(reki)*, dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1501 of file `tempassembled.f90`.

Here is the caller graph for this function:



3.4.2.32 subroutine `nwtc_io::allocary::allarray2` ( `real(reki)`, `dimension (:,:)`, `allocatable Ary`, `integer`, `intent(in) AryDim1`, `integer`, `intent(in) AryDim2`, `character(*)`, `intent(in) Descr`, `integer`, `intent(out)`, `optional ErrStat` )

Definition at line 29241 of file `tempassembled.f90`.

3.4.2.33 subroutine `nwtc_io::allocary::allarray2` ( `real(reki)`, `dimension (:,:)`, `allocatable Ary`, `integer`, `intent(in) AryDim1`, `integer`, `intent(in) AryDim2`, `character(*)`, `intent(in) Descr`, `integer`, `intent(out)`, `optional ErrStat` )

Definition at line 15371 of file `tempassembled.f90`.

3.4.2.34 subroutine `nwtc_io::allocary::allarray3` ( `real(reki)`, `dimension (:,:,:)`, `allocatable Ary`, `integer`, `intent(in) AryDim1`, `integer`, `intent(in) AryDim2`, `integer`, `intent(in) AryDim3`, `character(*)`, `intent(in) Descr`, `integer`, `intent(out)`, `optional ErrStat` )

Definition at line 29276 of file `tempassembled.f90`.

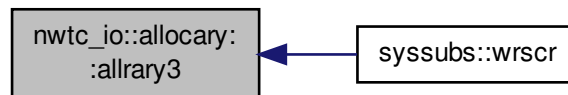
3.4.2.35 subroutine `nwtc_io::allocary::allarray3` ( `real(reki)`, `dimension (:,:,:)`, `allocatable Ary`, `integer`, `intent(in) AryDim1`, `integer`, `intent(in) AryDim2`, `integer`, `intent(in) AryDim3`, `character(*)`, `intent(in) Descr`, `integer`, `intent(out)`, `optional ErrStat` )

Definition at line 15406 of file `tempassembled.f90`.

3.4.2.36 subroutine `nwtc_io::allocary::allarray3` ( `real(reki)`, `dimension (:,:,:)`, `allocatable Ary`, `integer`, `intent(in) AryDim1`, `integer`, `intent(in) AryDim2`, `integer`, `intent(in) AryDim3`, `character(*)`, `intent(in) Descr`, `integer`, `intent(out)`, `optional ErrStat` )

Definition at line 1536 of file `tempassembled.f90`.

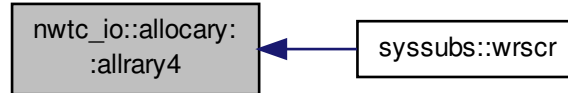
Here is the caller graph for this function:



3.4.2.37 subroutine nwtc\_io::allocary::allrary4 ( real(reki), dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, integer, intent(in) *AryDim4*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1572 of file tempassembled.f90.

Here is the caller graph for this function:



3.4.2.38 subroutine nwtc\_io::allocary::allrary4 ( real(reki), dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, integer, intent(in) *AryDim4*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15442 of file tempassembled.f90.

3.4.2.39 subroutine nwtc\_io::allocary::allrary4 ( real(reki), dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, integer, intent(in) *AryDim4*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29312 of file tempassembled.f90.

The documentation for this interface was generated from the following file:

- [tempassembled.f90](#)

## 3.5 ctwind::ct\_backgr Type Reference

### Public Attributes

- character(1024) [windfile](#)
- integer [windfiletype](#)
- logical [coherentstr](#)

### 3.5.1 Detailed Description

Definition at line 7291 of file tempassembled.f90.

### 3.5.2 Member Data Documentation

#### 3.5.2.1 logical ctwind::ct\_backgr::coherentstr

Definition at line 7294 of file tempassembled.f90.

## 3.5.2.2 character(1024) ctwind::ct\_backgr::windfile

Definition at line 7292 of file tempassembled.f90.

## 3.5.2.3 integer ctwind::ct\_backgr::windfiletype

Definition at line 7293 of file tempassembled.f90.

The documentation for this type was generated from the following file:

- [tempassembled.f90](#)

## 3.6 ctwind Module Reference

## Data Types

- type [ct\\_backgr](#)
- type [ctwindfiles](#)

## Public Member Functions

- subroutine, public [ct\\_init](#) (UnWind, WindFile, BackGrndValues, ErrStat)
- subroutine, public [ct\\_setrefval](#) (Height, HWidth, ErrStat)
- type(inflintrpout) function, public [ct\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [ct\\_terminate](#) (ErrStat)
- subroutine, public [ct\\_init](#) (UnWind, WindFile, BackGrndValues, ErrStat)
- subroutine, public [ct\\_setrefval](#) (Height, HWidth, ErrStat)
- type(inflintrpout) function, public [ct\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [ct\\_terminate](#) (ErrStat)
- subroutine, public [ct\\_init](#) (UnWind, WindFile, BackGrndValues, ErrStat)
- subroutine, public [ct\\_setrefval](#) (Height, HWidth, ErrStat)
- type(inflintrpout) function, public [ct\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [ct\\_terminate](#) (ErrStat)

## Private Member Functions

- subroutine [readctdata](#) (UnWind, CTFileNo, ltime, ErrStat)
- subroutine [loadctdata](#) (UnWind, FileName, lTime, IComp, Vel, ErrStat)
- subroutine [readctp](#) (UnWind, FileName, CTPscaling, ErrStat)
- subroutine [readctts](#) (UnWind, FileName, CT\_SC\_ext, ErrStat)
- subroutine [readcttscales](#) (UnWind, FileName, ErrStat)
- subroutine [readctdata](#) (UnWind, CTFileNo, ltime, ErrStat)
- subroutine [loadctdata](#) (UnWind, FileName, lTime, IComp, Vel, ErrStat)
- subroutine [readctp](#) (UnWind, FileName, CTPscaling, ErrStat)
- subroutine [readctts](#) (UnWind, FileName, CT\_SC\_ext, ErrStat)
- subroutine [readcttscales](#) (UnWind, FileName, ErrStat)
- subroutine [readctdata](#) (UnWind, CTFileNo, ltime, ErrStat)
- subroutine [loadctdata](#) (UnWind, FileName, lTime, IComp, Vel, ErrStat)
- subroutine [readctp](#) (UnWind, FileName, CTPscaling, ErrStat)
- subroutine [readctts](#) (UnWind, FileName, CT\_SC\_ext, ErrStat)
- subroutine [readcttscales](#) (UnWind, FileName, ErrStat)

## Private Attributes

- integer, parameter `numcomps` = 3
- real(reki) `delyctgrid`
- real(reki) `delzctgrid`
- real(reki) `ctdistsc`
- real(reki), dimension(`numcomps`) `ctoffset`
- real(reki), dimension(`numcomps`) `ctscale`
- real(reki), dimension(:,:), allocatable `ctvelu`
- real(reki), dimension(:,:), allocatable `ctvelv`
- real(reki), dimension(:,:), allocatable `ctvelw`
- real(reki) `ctlty`
- real(reki) `ctlz`
- real(reki) `ctscalelevel`
- real(reki), dimension(:), allocatable `tdata`
- real(reki) `ct_zref`
- real(reki) `ctyhwid`
- real(reki) `ctymax`
- real(reki) `ctyt`
- real(reki) `ctzmax`
- real(reki) `invmtws`
- integer `ct_df_y`
- integer `ct_df_z`
- integer, dimension(2) `ctvel_files`
- integer `indct_hi`
- integer `indct_lo`
- integer `numctt`
- integer `numcty`
- integer `numctyd`
- integer `numctyd1`
- integer `numctz`
- integer `numctzd`
- integer `numctzd1`
- integer, save `timeindx` = 0
- integer, dimension(:), allocatable `timestpct`
- integer `ctwindunit`
- logical `ctvertshft`
- character(3) `ctext`
- character(1024) `ctspath`

## 3.6.1 Detailed Description

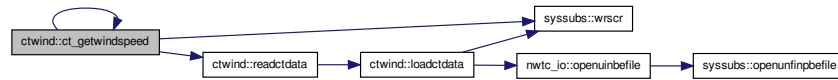
Definition at line 7214 of file `tempassembled.f90`.

## 3.6.2 Member Function/Subroutine Documentation

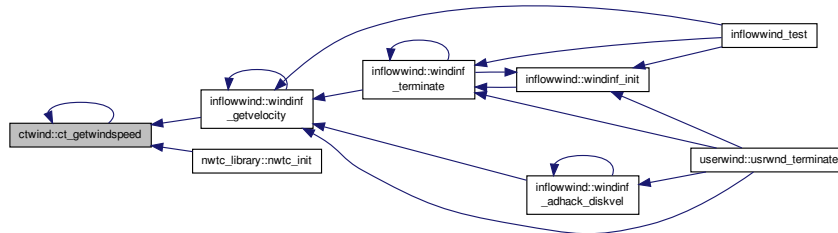
3.6.2.1 `type(inflintrpout) function, public ctwind::ct_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 7510 of file tempassembled.f90.

Here is the call graph for this function:

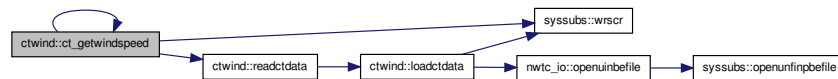


Here is the caller graph for this function:

3.6.2.2 `type(inflintrpout) function, public ctwind::ct_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

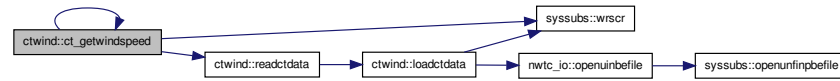
Definition at line 35250 of file tempassembled.f90.

Here is the call graph for this function:

3.6.2.3 `type(inflintrpout) function, public ctwind::ct_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 21380 of file tempassembled.f90.

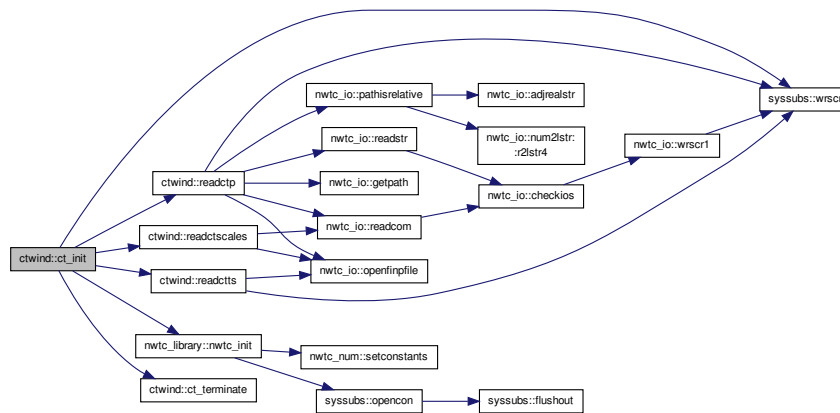
Here is the call graph for this function:



### 3.6.2.4 subroutine, public ctwind::ct\_init ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, type(ct\_backgr), intent(out) *BackGrndValues*, integer, intent(out) *ErrStat* )

Definition at line 35045 of file tempassembled.f90.

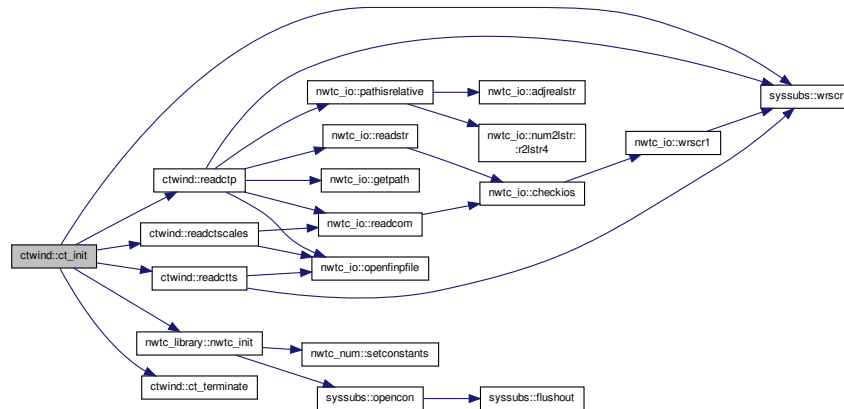
Here is the call graph for this function:



### 3.6.2.5 subroutine, public ctwind::ct\_init ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, type(ct\_backgr), intent(out) *BackGrndValues*, integer, intent(out) *ErrStat* )

Definition at line 21175 of file tempassembled.f90.

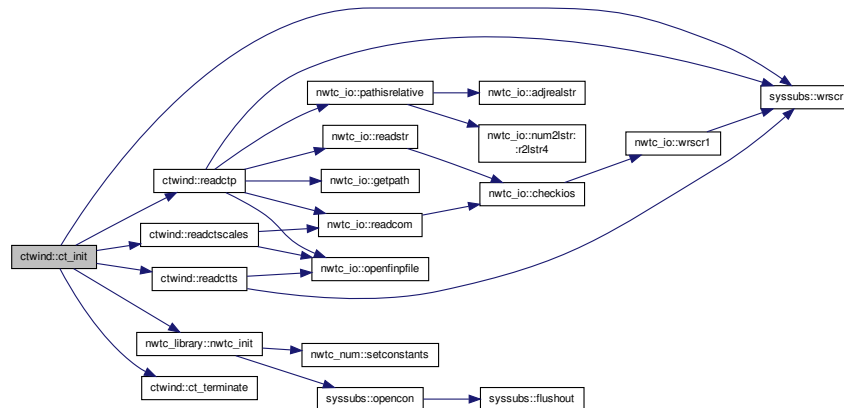
Here is the call graph for this function:



3.6.2.6 subroutine, public `ctwind::ct_init ( integer, intent(in) UnWind, character(*), intent(in) WindFile, type(ct_backgr), intent(out) BackGrndValues, integer, intent(out) ErrStat )`

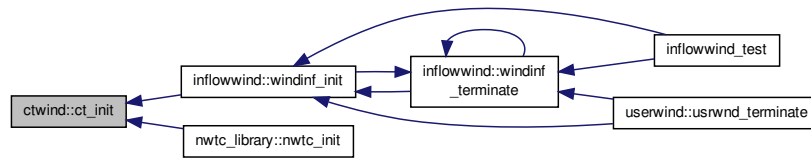
Definition at line 7305 of file `tempassembled.f90`.

Here is the call graph for this function:





Here is the caller graph for this function:



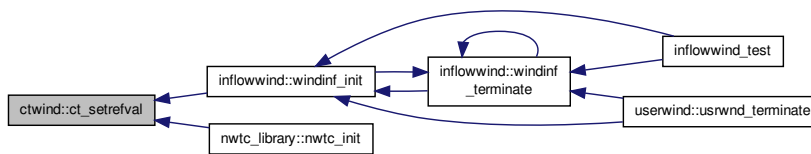
3.6.2.7 subroutine, public ctwind::ct\_setrefval ( real(reki), intent(in) *Height*, real(reki), intent(in), optional *HWidth*, integer, intent(out) *ErrStat* )

Definition at line 7456 of file tempassembled.f90.

Here is the call graph for this function:



Here is the caller graph for this function:



3.6.2.8 subroutine, public ctwind::ct\_setrefval ( real(reki), intent(in) *Height*, real(reki), intent(in), optional *HWidth*, integer, intent(out) *ErrStat* )

Definition at line 35196 of file tempassembled.f90.

Here is the call graph for this function:



**3.6.2.9** subroutine, public ctwind::ct\_setrefval ( real(reki), intent(in) *Height*, real(reki), intent(in), optional *HWidth*, integer, intent(out) *ErrStat* )

Definition at line 21326 of file tempassembled.f90.

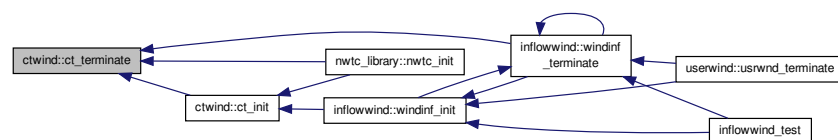
Here is the call graph for this function:



**3.6.2.10** subroutine, public ctwind::ct\_terminate ( integer, intent(out) *ErrStat* )

Definition at line 8190 of file tempassembled.f90.

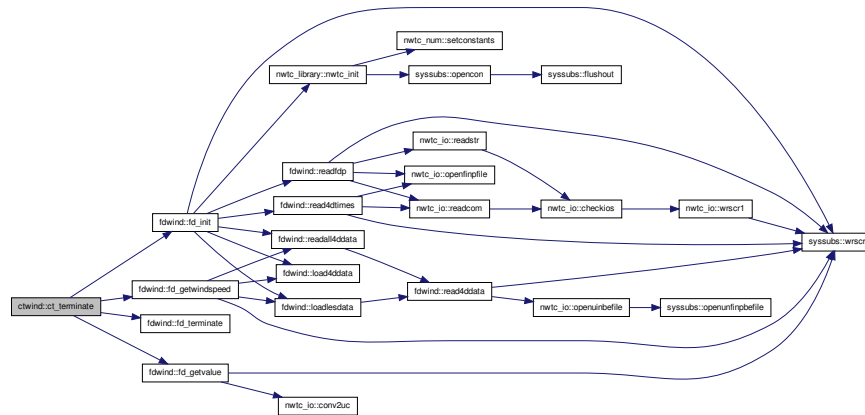
Here is the caller graph for this function:



**3.6.2.11** subroutine, public ctwind::ct\_terminate ( integer, intent(out) *ErrStat* )

Definition at line 22060 of file tempassembled.f90.

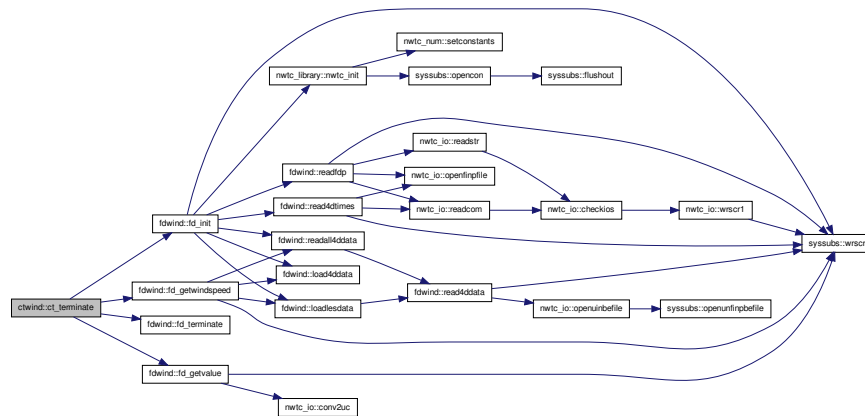
Here is the call graph for this function:



### 3.6.2.12 subroutine, public ctwind::ct\_terminate ( integer, intent(out) ErrStat )

Definition at line 35930 of file tempassembled.f90.

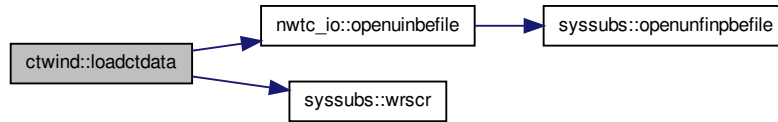
Here is the call graph for this function:



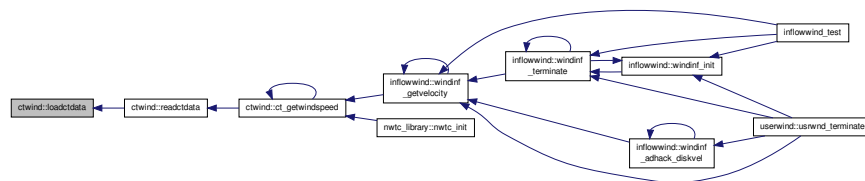
### 3.6.2.13 subroutine ctwind::loadctdata ( integer, intent(in) UnWind, character(\*), intent(in) FileName, integer, intent(in) ITime, integer, intent(in) IComp, real(reki), dimension (numctyd,numctzd,2), intent(inout) Vel, integer, intent(out) ErrStat ) [private]

Definition at line 7840 of file tempassembled.f90.

Here is the call graph for this function:



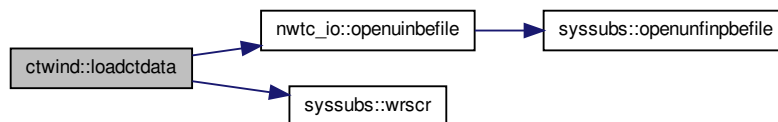
Here is the caller graph for this function:



**3.6.2.14** subroutine `ctwind::loadctdata` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, integer, intent(in) *ITime*, integer, intent(in) *IComp*, real(reki), dimension (numctyd,numctzd,2), intent(inout) *Vel*, integer, intent(out) *ErrStat* )  
[private]

Definition at line 35580 of file `tempassembled.f90`.

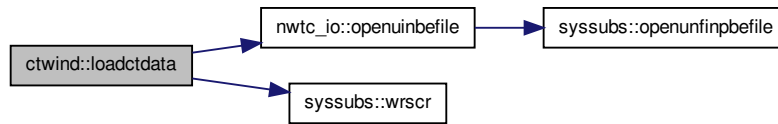
Here is the call graph for this function:



**3.6.2.15** subroutine `ctwind::loadctdata` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, integer, intent(in) *ITime*, integer, intent(in) *IComp*, real(reki), dimension (numctyd,numctzd,2), intent(inout) *Vel*, integer, intent(out) *ErrStat* )  
[private]

Definition at line 21710 of file `tempassembled.f90`.

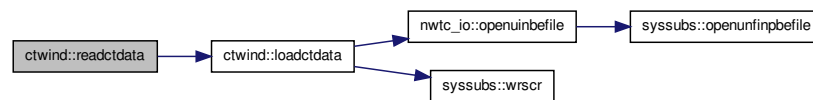
Here is the call graph for this function:



**3.6.2.16** subroutine `ctwind::readctdata` ( integer, intent(in) *UnWind*, integer, intent(in) *CTFileNo*, integer, intent(in) *ltime*, integer, intent(out) *ErrStat* ) [private]

Definition at line 21657 of file `tempassembled.f90`.

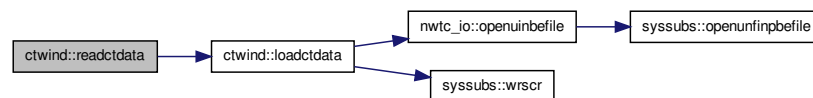
Here is the call graph for this function:



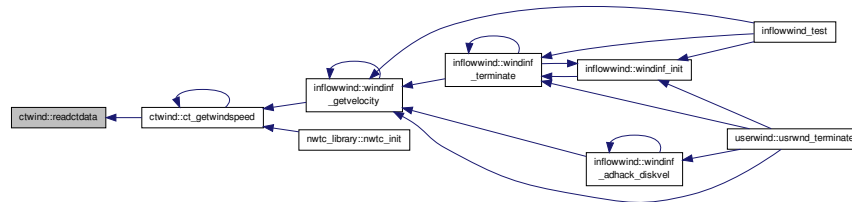
**3.6.2.17** subroutine `ctwind::readctdata` ( integer, intent(in) *UnWind*, integer, intent(in) *CTFileNo*, integer, intent(in) *ltime*, integer, intent(out) *ErrStat* ) [private]

Definition at line 7787 of file `tempassembled.f90`.

Here is the call graph for this function:



Here is the caller graph for this function:



**3.6.2.18** subroutine `ctwind::readctdata` ( integer, intent(in) *UnWind*, integer, intent(in) *CTFileNo*, integer, intent(in) *ltime*, integer, intent(out) *ErrStat* ) [private]

Definition at line 35527 of file `tempassembled.f90`.

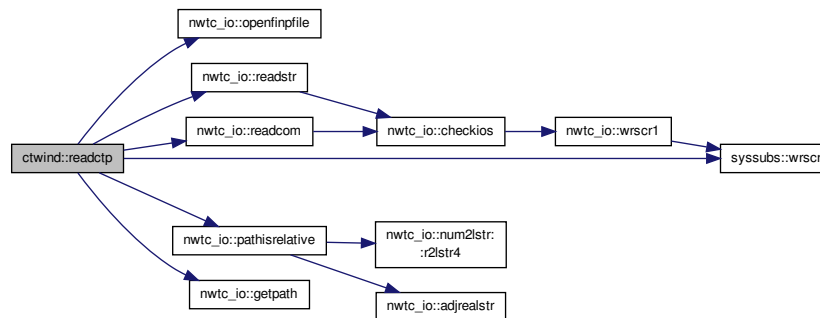
Here is the call graph for this function:



**3.6.2.19** subroutine `ctwind::readctp` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, type(ctwindfiles), intent(out) *CTPscaling*, integer, intent(out) *ErrStat* ) [private]

Definition at line 35648 of file `tempassembled.f90`.

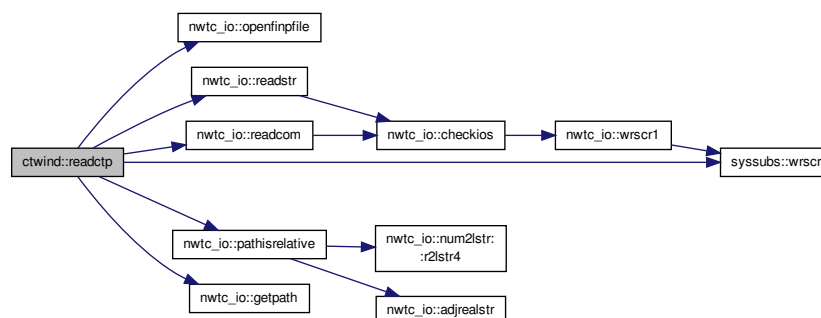
Here is the call graph for this function:



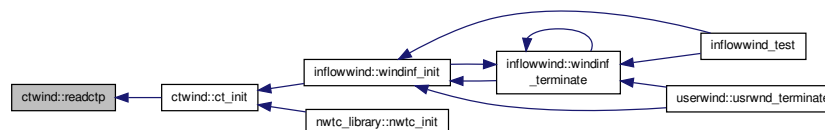
```
3.6.2.20 subroutine ctwind::readctp ( integer,intent(in) UnWind, character(*),intent(in) FileName, type(ctwindfiles),intent(out)
      CTPscaling, integer,intent(out) ErrStat ) [private]
```

Definition at line 7908 of file tempassembled.f90.

Here is the call graph for this function:



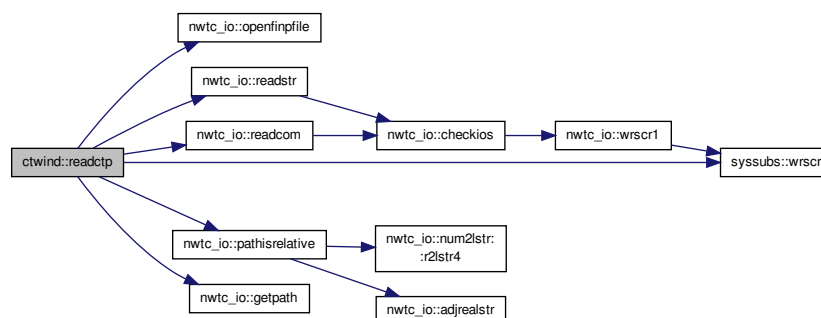
Here is the caller graph for this function:



```
3.6.2.21 subroutine ctwind::readctp ( integer,intent(in) UnWind, character(*),intent(in) FileName, type(ctwindfiles),intent(out)
      CTPscaling, integer,intent(out) ErrStat ) [private]
```

Definition at line 21778 of file tempassembled.f90.

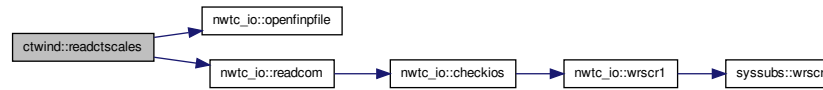
Here is the call graph for this function:



3.6.2.22 subroutine `ctwind::readctcales` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, integer, intent(out) *ErrStat* )  
[private]

Definition at line 35870 of file `tempassembled.f90`.

Here is the call graph for this function:



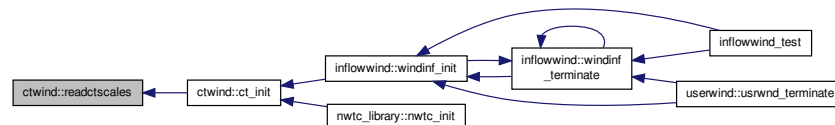
3.6.2.23 subroutine `ctwind::readctcales` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, integer, intent(out) *ErrStat* )  
[private]

Definition at line 8130 of file `tempassembled.f90`.

Here is the call graph for this function:



Here is the caller graph for this function:



3.6.2.24 subroutine `ctwind::readctcales` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, integer, intent(out) *ErrStat* )  
[private]

Definition at line 22000 of file `tempassembled.f90`.

Here is the call graph for this function:

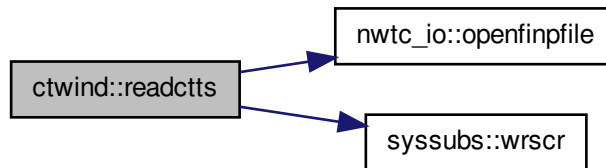




3.6.2.25 subroutine ctwind::readctts ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, character(3), intent(out) *CT\_SC\_ext*, integer, intent(out) *ErrStat* ) [private]

Definition at line 21858 of file tempassembled.f90.

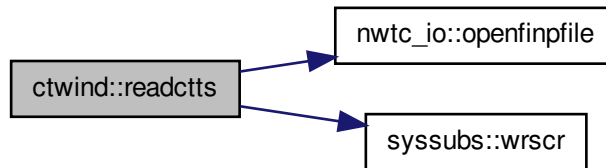
Here is the call graph for this function:



3.6.2.26 subroutine ctwind::readctts ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, character(3), intent(out) *CT\_SC\_ext*, integer, intent(out) *ErrStat* ) [private]

Definition at line 35728 of file tempassembled.f90.

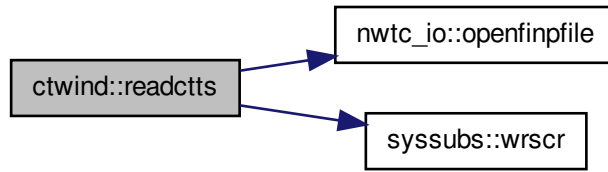
Here is the call graph for this function:



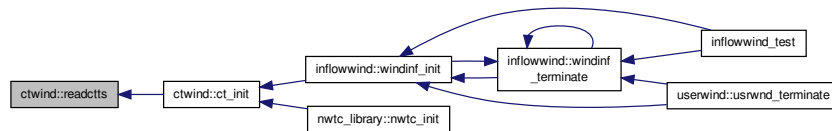
3.6.2.27 subroutine ctwind::readctts ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, character(3), intent(out) *CT\_SC\_ext*, integer, intent(out) *ErrStat* ) [private]

Definition at line 7988 of file tempassembled.f90.

Here is the call graph for this function:



Here is the caller graph for this function:



### 3.6.3 Member Data Documentation

#### 3.6.3.1 integer ctwind::ct\_df\_y [private]

Definition at line 7261 of file tempassembled.f90.

#### 3.6.3.2 integer ctwind::ct\_df\_z [private]

Definition at line 7262 of file tempassembled.f90.

#### 3.6.3.3 real(reki) ctwind::ct\_zref [private]

Definition at line 7254 of file tempassembled.f90.

#### 3.6.3.4 real(reki) ctwind::ctdistsc [private]

Definition at line 7241 of file tempassembled.f90.

#### 3.6.3.5 character(3) ctwind::ctext [private]

Definition at line 7282 of file tempassembled.f90.

#### 3.6.3.6 real(reki) ctwind::ctly [private]

Definition at line 7249 of file tempassembled.f90.

**3.6.3.7** `real(reki) ctwind::ctlz [private]`

Definition at line 7250 of file tempassembled.f90.

**3.6.3.8** `real(reki), dimension (numcomps) ctwind::ctoffset [private]`

Definition at line 7242 of file tempassembled.f90.

**3.6.3.9** `real(reki), dimension (numcomps) ctwind::ctscale [private]`

Definition at line 7243 of file tempassembled.f90.

**3.6.3.10** `real(reki) ctwind::ctscalelevel [private]`

Definition at line 7251 of file tempassembled.f90.

**3.6.3.11** `character(1024) ctwind::ctspath [private]`

Definition at line 7283 of file tempassembled.f90.

**3.6.3.12** `integer, dimension(2) ctwind::ctvel_files [private]`

Definition at line 7263 of file tempassembled.f90.

**3.6.3.13** `real(reki), dimension (:,:), allocatable ctwind::ctvelu [private]`

Definition at line 7246 of file tempassembled.f90.

**3.6.3.14** `real(reki), dimension (:,:), allocatable ctwind::ctvelv [private]`

Definition at line 7247 of file tempassembled.f90.

**3.6.3.15** `real(reki), dimension (:,:), allocatable ctwind::ctvelw [private]`

Definition at line 7248 of file tempassembled.f90.

**3.6.3.16** `logical ctwind::ctvertshft [private]`

Definition at line 7280 of file tempassembled.f90.

**3.6.3.17** `integer ctwind::ctwindunit [private]`

Definition at line 7278 of file tempassembled.f90.

**3.6.3.18** `real(reki) ctwind::ctyhwid [private]`

Definition at line 7255 of file tempassembled.f90.

**3.6.3.19** `real(reki) ctwind::ctymax [private]`

Definition at line 7256 of file tempassembled.f90.

**3.6.3.20** `real(reki) ctwind::ctyt [private]`

Definition at line 7257 of file tempassembled.f90.

3.6.3.21 `real(reki) ctwind::ctzmax [private]`

Definition at line 7258 of file tempassembled.f90.

3.6.3.22 `real(reki) ctwind::delyctgrid [private]`

Definition at line 7239 of file tempassembled.f90.

3.6.3.23 `real(reki) ctwind::delzctgrid [private]`

Definition at line 7240 of file tempassembled.f90.

3.6.3.24 `integer ctwind::indct_hi [private]`

Definition at line 7265 of file tempassembled.f90.

3.6.3.25 `integer ctwind::indct_lo [private]`

Definition at line 7266 of file tempassembled.f90.

3.6.3.26 `real(reki) ctwind::invmctws [private]`

Definition at line 7259 of file tempassembled.f90.

3.6.3.27 `integer parameter ctwind::numcomps = 3 [private]`

Definition at line 7236 of file tempassembled.f90.

3.6.3.28 `integer ctwind::numctt [private]`

Definition at line 7268 of file tempassembled.f90.

3.6.3.29 `integer ctwind::numcty [private]`

Definition at line 7269 of file tempassembled.f90.

3.6.3.30 `integer ctwind::numctyd [private]`

Definition at line 7270 of file tempassembled.f90.

3.6.3.31 `integer ctwind::numctyd1 [private]`

Definition at line 7271 of file tempassembled.f90.

3.6.3.32 `integer ctwind::numctz [private]`

Definition at line 7272 of file tempassembled.f90.

3.6.3.33 `integer ctwind::numctzd [private]`

Definition at line 7273 of file tempassembled.f90.

3.6.3.34 `integer ctwind::numctzd1 [private]`

Definition at line 7274 of file tempassembled.f90.

3.6.3.35 `real(reki), dimension (:), allocatable ctwind::tdata` [private]

Definition at line 7252 of file tempassembled.f90.

3.6.3.36 `integer save ctwind::timeindx = 0` [private]

Definition at line 7275 of file tempassembled.f90.

3.6.3.37 `integer, dimension (:), allocatable ctwind::timestpct` [private]

Definition at line 7276 of file tempassembled.f90.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

## 3.7 ctwind::ctwindfiles Type Reference

### Private Attributes

- `character(1024) cttsfile`
- `character(1024) ctbackgr`

### 3.7.1 Detailed Description

Definition at line 7285 of file tempassembled.f90.

### 3.7.2 Member Data Documentation

3.7.2.1 `character(1024) ctwind::ctwindfiles::ctbackgr` [private]

Definition at line 7287 of file tempassembled.f90.

3.7.2.2 `character(1024) ctwind::ctwindfiles::cttsfile` [private]

Definition at line 7286 of file tempassembled.f90.

The documentation for this type was generated from the following file:

- [tempassembled.f90](#)

## 3.8 nwtc\_io::dispnvd Interface Reference

### Public Member Functions

- subroutine [dispnvd0](#)
- subroutine [dispnvd1](#) (ProgInfo)
- subroutine [dispnvd2](#) (Name, Ver)
- subroutine [dispnvd0](#)
- subroutine [dispnvd1](#) (ProgInfo)
- subroutine [dispnvd2](#) (Name, Ver)
- subroutine [dispnvd0](#)

- subroutine [dispnvd1](#) (ProgInfo)
- subroutine [dispnvd2](#) (Name, Ver)

### 3.8.1 Detailed Description

Definition at line 1107 of file tempassembled.f90.

### 3.8.2 Member Function/Subroutine Documentation

#### 3.8.2.1 subroutine nwtc\_io::dispnvd::dispnvd0 ( )

Definition at line 1937 of file tempassembled.f90.

Here is the caller graph for this function:



#### 3.8.2.2 subroutine nwtc\_io::dispnvd::dispnvd0 ( )

Definition at line 15807 of file tempassembled.f90.

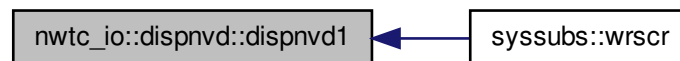
#### 3.8.2.3 subroutine nwtc\_io::dispnvd::dispnvd0 ( )

Definition at line 29677 of file tempassembled.f90.

#### 3.8.2.4 subroutine nwtc\_io::dispnvd::dispnvd1 ( type( progdesc ), intent(in) ProgInfo )

Definition at line 1951 of file tempassembled.f90.

Here is the caller graph for this function:



#### 3.8.2.5 subroutine nwtc\_io::dispnvd::dispnvd1 ( type( progdesc ), intent(in) ProgInfo )

Definition at line 29691 of file tempassembled.f90.

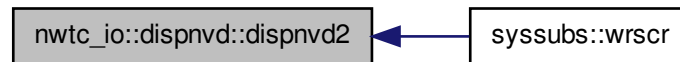
3.8.2.6 subroutine nwtc\_io::dispnvd::dispnvd1 ( type( progdesc ), intent(in) ProgInfo )

Definition at line 15821 of file tempassembled.f90.

3.8.2.7 subroutine nwtc\_io::dispnvd::dispnvd2 ( character(\*), intent(in) Name, character(\*), intent(in) Ver )

Definition at line 1969 of file tempassembled.f90.

Here is the caller graph for this function:



3.8.2.8 subroutine nwtc\_io::dispnvd::dispnvd2 ( character(\*), intent(in) Name, character(\*), intent(in) Ver )

Definition at line 29709 of file tempassembled.f90.

3.8.2.9 subroutine nwtc\_io::dispnvd::dispnvd2 ( character(\*), intent(in) Name, character(\*), intent(in) Ver )

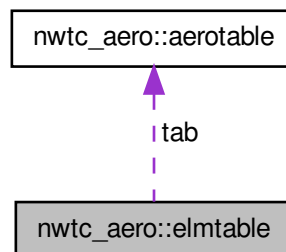
Definition at line 15839 of file tempassembled.f90.

The documentation for this interface was generated from the following file:

- [tempassembled.f90](#)

### 3.9 nwtc\_aero::elmtree Type Reference

Collaboration diagram for nwtc\_aero::elmtree:



## Public Attributes

- integer [numtabs](#)
- type([aerotable](#)), dimension(:), allocatable [tab](#)

## 3.9.1 Detailed Description

Definition at line 6020 of file tempassembled.f90.

## 3.9.2 Member Data Documentation

## 3.9.2.1 integer nwtc\_aero::elmtable::numtabs

Definition at line 6021 of file tempassembled.f90.

3.9.2.2 type([aerotable](#)), dimension (:), allocatable nwtc\_aero::elmtable::tab

Definition at line 6022 of file tempassembled.f90.

The documentation for this type was generated from the following file:

- [tempassembled.f90](#)

## 3.10 nwtc\_num::equalrealnos Interface Reference

## Public Member Functions

- logical function [equalrealnos4](#) (ReNum1, ReNum2)
- logical function [equalrealnos8](#) (ReNum1, ReNum2)
- logical function [equalrealnos16](#) (ReNum1, ReNum2)
- logical function [equalrealnos4](#) (ReNum1, ReNum2)
- logical function [equalrealnos8](#) (ReNum1, ReNum2)
- logical function [equalrealnos16](#) (ReNum1, ReNum2)
- logical function [equalrealnos4](#) (ReNum1, ReNum2)
- logical function [equalrealnos8](#) (ReNum1, ReNum2)
- logical function [equalrealnos16](#) (ReNum1, ReNum2)

## 3.10.1 Detailed Description

Definition at line 4498 of file tempassembled.f90.

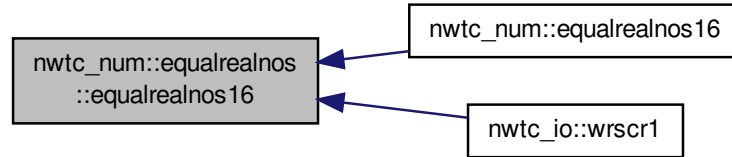
## 3.10.2 Member Function/Subroutine Documentation

3.10.2.1 logical function nwtc\_num::equalrealnos::equalrealnos16 ( real(quki), intent(in) *ReNum1*, real(quki), intent(in) *ReNum2* )

Definition at line 4764 of file tempassembled.f90.



Here is the caller graph for this function:



3.10.2.2 logical function `nwtc_num::equalrealnos::equalrealnos16 ( real(quki), intent(in) ReNum1, real(quki), intent(in) ReNum2 )`

Definition at line 32504 of file `tempassembled.f90`.

3.10.2.3 logical function `nwtc_num::equalrealnos::equalrealnos16 ( real(quki), intent(in) ReNum1, real(quki), intent(in) ReNum2 )`

Definition at line 18634 of file `tempassembled.f90`.

3.10.2.4 logical function `nwtc_num::equalrealnos::equalrealnos4 ( real(siki), intent(in) ReNum1, real(siki), intent(in) ReNum2 )`

Definition at line 32430 of file `tempassembled.f90`.

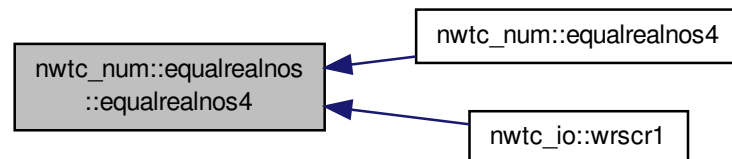
3.10.2.5 logical function `nwtc_num::equalrealnos::equalrealnos4 ( real(siki), intent(in) ReNum1, real(siki), intent(in) ReNum2 )`

Definition at line 18560 of file `tempassembled.f90`.

3.10.2.6 logical function `nwtc_num::equalrealnos::equalrealnos4 ( real(siki), intent(in) ReNum1, real(siki), intent(in) ReNum2 )`

Definition at line 4690 of file `tempassembled.f90`.

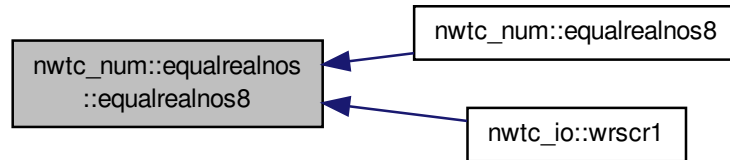
Here is the caller graph for this function:



3.10.2.7 logical function `nwtc_num::equalrealnos::equalrealnos8 ( real(r8ki), intent(in) ReNum1, real(r8ki), intent(in) ReNum2 )`

Definition at line 4727 of file `tempassembled.f90`.

Here is the caller graph for this function:



3.10.2.8 logical function `nwtc_num::equalrealnos::equalrealnos8 ( real(r8ki), intent(in) ReNum1, real(r8ki), intent(in) ReNum2 )`

Definition at line 18597 of file `tempassembled.f90`.

3.10.2.9 logical function `nwtc_num::equalrealnos::equalrealnos8 ( real(r8ki), intent(in) ReNum1, real(r8ki), intent(in) ReNum2 )`

Definition at line 32467 of file `tempassembled.f90`.

The documentation for this interface was generated from the following file:

- [tempassembled.f90](#)

## 3.11 nwtc\_io::fastdatatype Type Reference

### Public Attributes

- character(1024) [file](#)
- character(1024) [descr](#)
- integer(b4ki) [numchans](#)
- integer(b4ki) [numrecs](#)
- real(r8ki) [timestep](#)
- character(20), dimension(:), allocatable [channames](#)
- character(20), dimension(:), allocatable [chanunits](#)
- real(reki), dimension(:,,:), allocatable [data](#)

### 3.11.1 Detailed Description

Definition at line 1004 of file `tempassembled.f90`.

### 3.11.2 Member Data Documentation

3.11.2.1 character(20), dimension(:), allocatable `nwtc_io::fastdatatype::channames`

Definition at line 1010 of file `tempassembled.f90`.

3.11.2.2 `character(20), dimension(:), allocatable nwtc_io::fastdatatype::chanunits`

Definition at line 1011 of file `tempassembled.f90`.

3.11.2.3 `real(reki), dimension(:,,:), allocatable nwtc_io::fastdatatype::data`

Definition at line 1012 of file `tempassembled.f90`.

3.11.2.4 `character(1024) nwtc_io::fastdatatype::descr`

Definition at line 1006 of file `tempassembled.f90`.

3.11.2.5 `character(1024) nwtc_io::fastdatatype::file`

Definition at line 1005 of file `tempassembled.f90`.

3.11.2.6 `integer(b4ki) nwtc_io::fastdatatype::numchans`

Definition at line 1007 of file `tempassembled.f90`.

3.11.2.7 `integer(b4ki) nwtc_io::fastdatatype::numrecs`

Definition at line 1008 of file `tempassembled.f90`.

3.11.2.8 `real(r8ki) nwtc_io::fastdatatype::timestep`

Definition at line 1009 of file `tempassembled.f90`.

The documentation for this type was generated from the following file:

- [tempassembled.f90](#)

## 3.12 fdwind Module Reference

## Public Member Functions

- subroutine, public [fd\\_init](#) (UnWind, WindFile, RefHt, ErrStat)
- `real(reki)` function, public [fd\\_getvalue](#) (RVarName, ErrStat)
- `type(inflintrpout)` function, public [fd\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [fd\\_terminate](#) (ErrStat)
- subroutine, public [fd\\_init](#) (UnWind, WindFile, RefHt, ErrStat)
- `real(reki)` function, public [fd\\_getvalue](#) (RVarName, ErrStat)
- `type(inflintrpout)` function, public [fd\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [fd\\_terminate](#) (ErrStat)
- subroutine, public [fd\\_init](#) (UnWind, WindFile, RefHt, ErrStat)
- `real(reki)` function, public [fd\\_getvalue](#) (RVarName, ErrStat)
- `type(inflintrpout)` function, public [fd\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [fd\\_terminate](#) (ErrStat)

## Private Member Functions

- subroutine [readfdp](#) (UnWind, FileName, FDTsfile, ErrStat)
- subroutine [read4dtimes](#) (UnWind, FileName, ErrStat)
- subroutine [readall4ddata](#) (UnWind, ErrStat)

- subroutine [loadlesdata](#) (UnWind, FileNo, Indx, ErrStat)
- subroutine [read4ddata](#) (UnWind, FileName, Comp, Indx4, Scale, Offset, ErrStat)
- subroutine [load4ddata](#) (InplIndx)
- subroutine [readfdp](#) (UnWind, FileName, FDTsfile, ErrStat)
- subroutine [read4dtimes](#) (UnWind, FileName, ErrStat)
- subroutine [readall4ddata](#) (UnWind, ErrStat)
- subroutine [loadlesdata](#) (UnWind, FileNo, Indx, ErrStat)
- subroutine [read4ddata](#) (UnWind, FileName, Comp, Indx4, Scale, Offset, ErrStat)
- subroutine [load4ddata](#) (InplIndx)
- subroutine [readfdp](#) (UnWind, FileName, FDTsfile, ErrStat)
- subroutine [read4dtimes](#) (UnWind, FileName, ErrStat)
- subroutine [readall4ddata](#) (UnWind, ErrStat)
- subroutine [loadlesdata](#) (UnWind, FileNo, Indx, ErrStat)
- subroutine [read4ddata](#) (UnWind, FileName, Comp, Indx4, Scale, Offset, ErrStat)
- subroutine [load4ddata](#) (InplIndx)

#### Private Attributes

- real(reki) [delxgrid](#)
- real(reki) [delygrid](#)
- real(reki) [delzgrid](#)
- real(reki) [fdper](#)
- real(reki), dimension(2) [fdtime](#)
- real(reki), dimension(:,:,:), allocatable [fdu](#)
- real(reki), dimension(:,:,:), allocatable [fdv](#)
- real(reki), dimension(:,:,:), allocatable [fdw](#)
- real(reki), dimension(:,:,:), allocatable [fdudata](#)
- real(reki), dimension(:,:,:), allocatable [fdvdata](#)
- real(reki), dimension(:,:,:), allocatable [fdwdata](#)
- real(reki) [lx](#)
- real(reki) [ly](#)
- real(reki) [lz](#)
- real(reki), dimension(3) [offsets](#)
- real(reki), save [prevtime](#)
- real(reki) [rotdiam](#)
- real(reki), dimension(3) [scalfact](#)
- real(reki) [scalelevel](#)
- real(reki), dimension(:), allocatable [times4d](#)
- real(reki) [tm\\_max](#)
- real(reki) [tsclfact](#)
- real(reki) [t\\_4d\\_en](#)
- real(reki) [t\\_4d\\_st](#)
- real(reki) [xmax](#)
- real(reki) [xt](#)

- real(reki) [ymax](#)
- real(reki) [yt](#)
- real(reki) [zmax](#)
- real(reki) [zt](#)
- real(reki) [zref](#)
- integer [fd\\_df\\_x](#)
- integer [fd\\_df\\_y](#)
- integer [fd\\_df\\_z](#)
- integer [fdfileno](#)
- integer [fdrecl](#)
- integer [ind4dadv](#)
- integer [ind4dnew](#)
- integer [ind4dold](#)
- integer [num4dt](#)
- integer, parameter [num4dtd](#) = 2
- integer [num4dx](#)
- integer [num4dxd](#)
- integer [num4dxd1](#)
- integer [num4dy](#)
- integer [num4dyd](#)
- integer [num4dyd1](#)
- integer [num4dz](#)
- integer [num4dzd](#)
- integer [num4dzd1](#)
- integer [numadvect](#)
- integer [shft4dnew](#)
- integer, dimension(:), allocatable [times4dix](#)
- integer [fdunit](#)
- logical [advect](#)
- logical [vertshft](#)
- logical, save [initialized](#) = .FALSE.
- character(5), dimension(:), allocatable [advfiles](#)
- character(1024) [fdspath](#)

### 3.12.1 Detailed Description

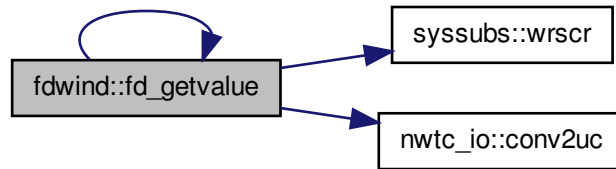
Definition at line 8212 of file tempassembled.f90.

### 3.12.2 Member Function/Subroutine Documentation

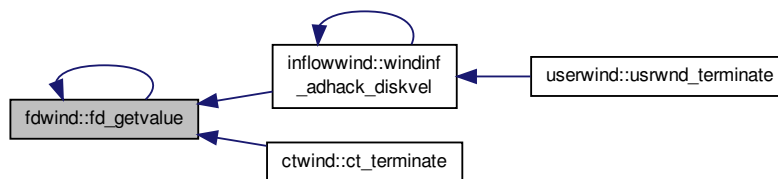
#### 3.12.2.1 [real\(reki\)](#) function, public [fdwind::fd\\_getvalue](#) ( [character\(\\*\)](#), intent(in) *RVarName*, integer, intent(out) *ErrStat* )

Definition at line 9071 of file tempassembled.f90.

Here is the call graph for this function:



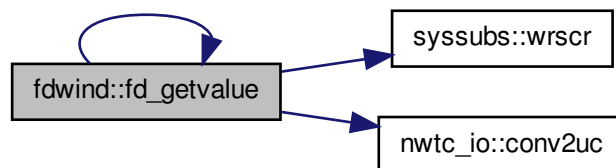
Here is the caller graph for this function:



### 3.12.2.2 real(reki) function, public `fdwind::fd_getvalue ( character(*), intent(in) RVarName, integer, intent(out) ErrStat )`

Definition at line 22941 of file `tempassembled.f90`.

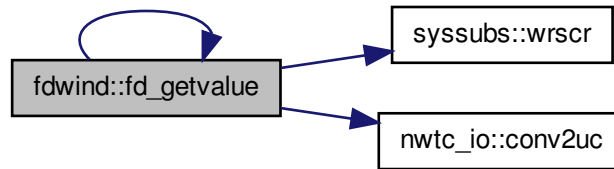
Here is the call graph for this function:



### 3.12.2.3 real(reki) function, public `fdwind::fd_getvalue ( character(*), intent(in) RVarName, integer, intent(out) ErrStat )`

Definition at line 36811 of file `tempassembled.f90`.

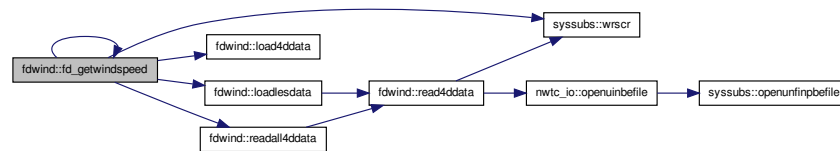
Here is the call graph for this function:



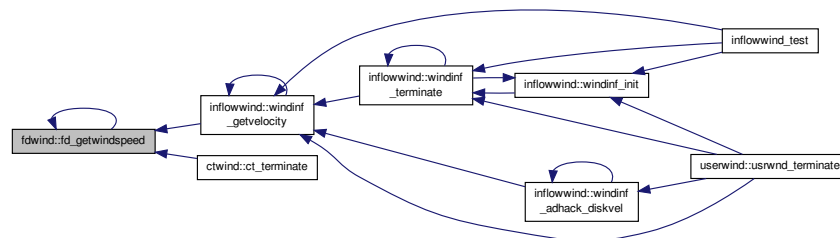
### 3.12.2.4 `type(inflintrpout) function, public fdwind::fd_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 9117 of file `tempassembled.f90`.

Here is the call graph for this function:



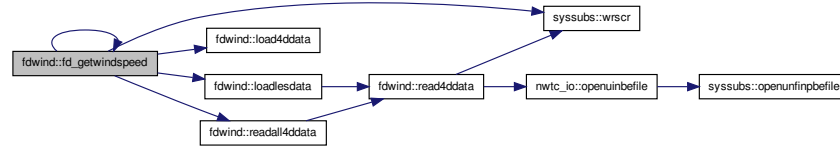
Here is the caller graph for this function:



### 3.12.2.5 `type(inflintrpout) function, public fdwind::fd_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 22987 of file `tempassembled.f90`.

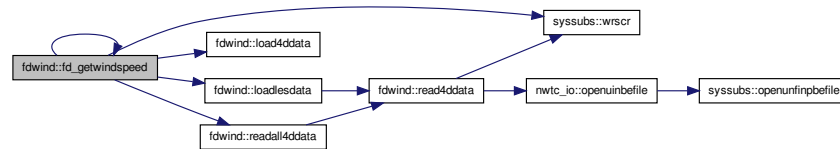
Here is the call graph for this function:



### 3.12.2.6 type(inflintrpout) function, public fdwind::fd\_getwindspeed ( real(reki), intent(in) *Time*, real(reki), dimension(3), intent(in) *InputPosition*, integer, intent(out) *ErrStat* )

Definition at line 36857 of file tempassembled.f90.

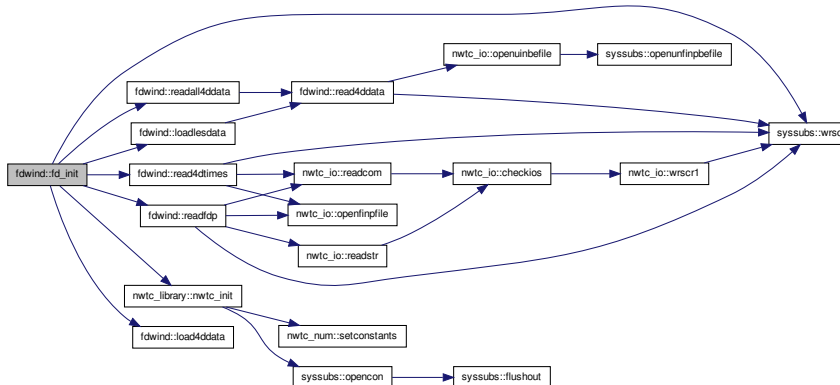
Here is the call graph for this function:



### 3.12.2.7 subroutine, public fdwind::fd\_init ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, real(reki), intent(in) *RefHt*, integer, intent(out) *ErrStat* )

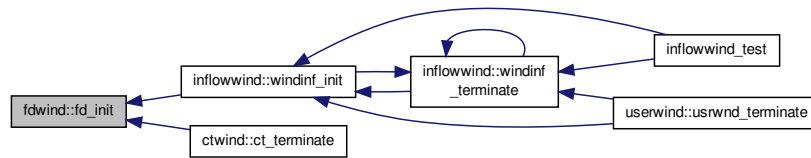
Definition at line 8304 of file tempassembled.f90.

Here is the call graph for this function:





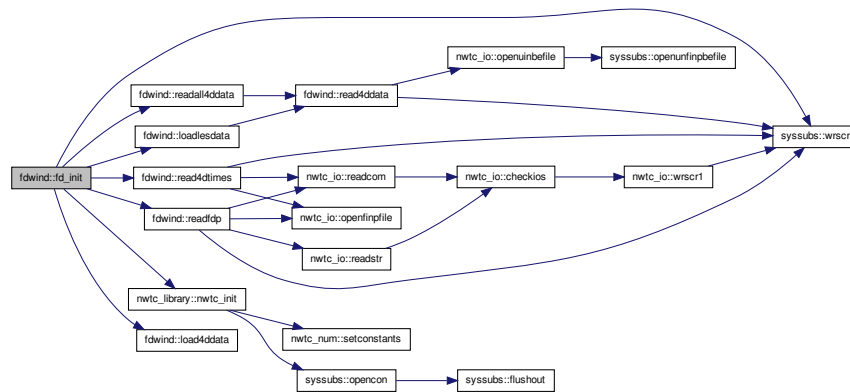
Here is the caller graph for this function:



**3.12.2.8** subroutine, public fdwind::fd\_init ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, real(reki), intent(in) *RefHt*, integer, intent(out) *ErrStat* )

Definition at line 22174 of file tempassembled.f90.

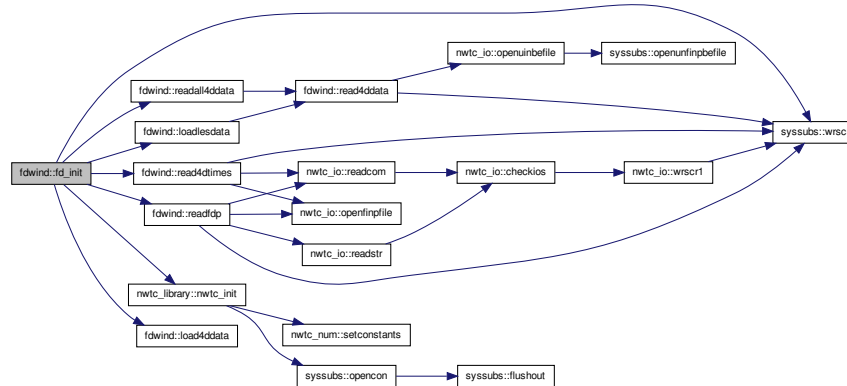
Here is the call graph for this function:



**3.12.2.9** subroutine, public fdwind::fd\_init ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, real(reki), intent(in) *RefHt*, integer, intent(out) *ErrStat* )

Definition at line 36044 of file tempassembled.f90.

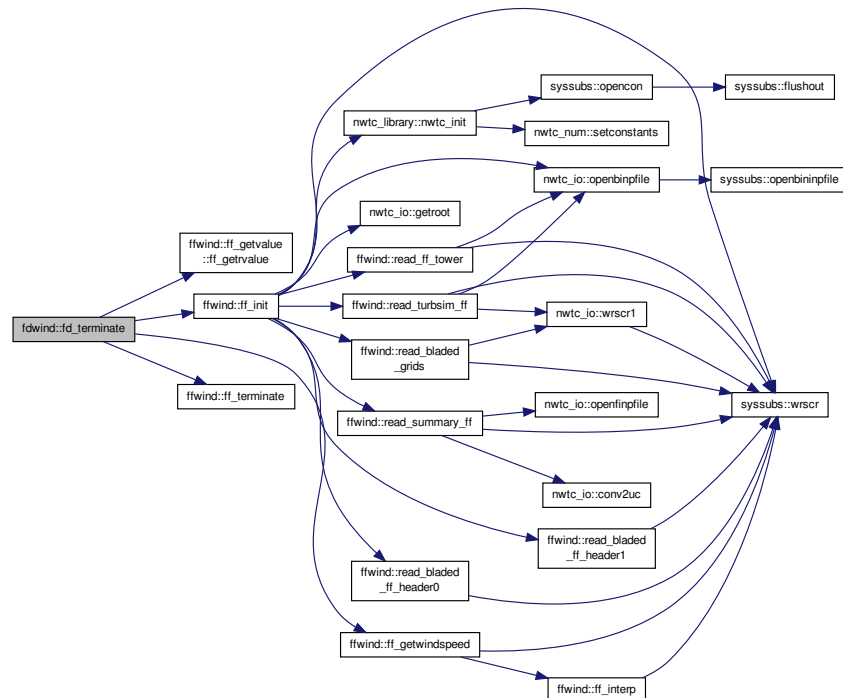
Here is the call graph for this function:



### 3.12.2.10 subroutine, public fdwind::fd\_terminate ( integer, intent(out) ErrStat )

Definition at line 23319 of file tempassembled.f90.

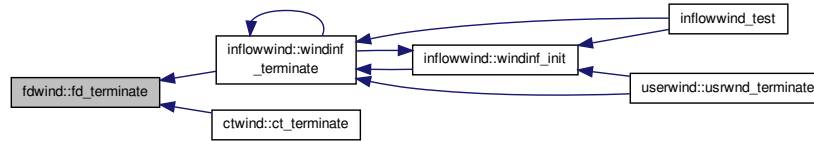
Here is the call graph for this function:



### 3.12.2.11 subroutine, public fdwind::fd\_terminate ( integer, intent(out) *ErrStat* )

Definition at line 9449 of file tempassembled.f90.

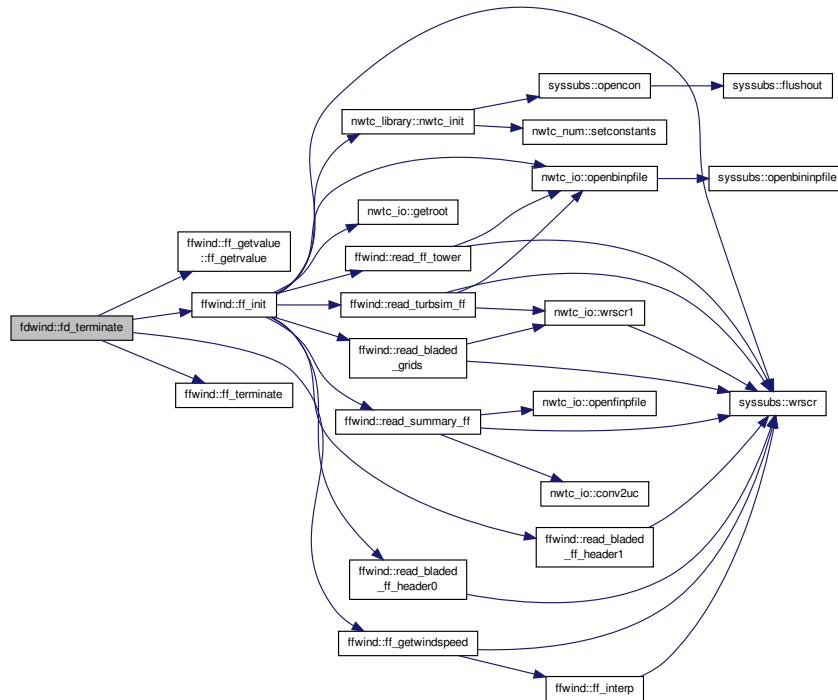
Here is the caller graph for this function:



### 3.12.2.12 subroutine, public fdwind::fd\_terminate ( integer, intent(out) *ErrStat* )

Definition at line 37189 of file tempassembled.f90.

Here is the call graph for this function:



### 3.12.2.13 subroutine fdwind::load4ddata ( integer, intent(in) *InpIndx* ) [private]

Definition at line 22914 of file tempassembled.f90.

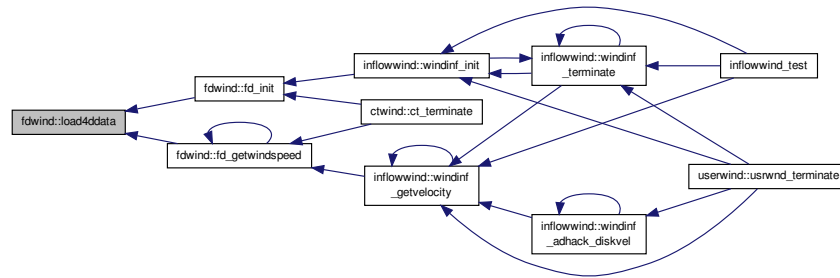
#### 3.12.2.14 subroutine fdwind::load4ddata ( integer, intent(in) *Inplndx* ) [private]

Definition at line 36784 of file tempassembled.f90.

#### 3.12.2.15 subroutine fdwind::load4ddata ( integer, intent(in) *Inplndx* ) [private]

Definition at line 9044 of file tempassembled.f90.

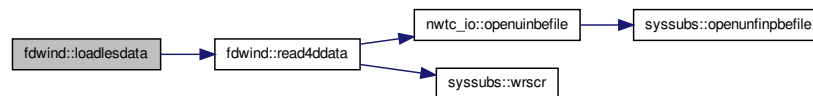
Here is the caller graph for this function:



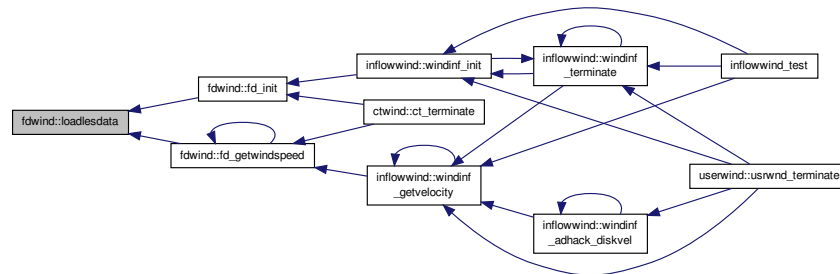
#### 3.12.2.16 subroutine fdwind::loadlesdata ( integer, intent(in) *UnWind*, integer, intent(in) *FileNo*, integer, intent(in) *Indx*, integer, intent(out) *ErrStat* ) [private]

Definition at line 8922 of file tempassembled.f90.

Here is the call graph for this function:



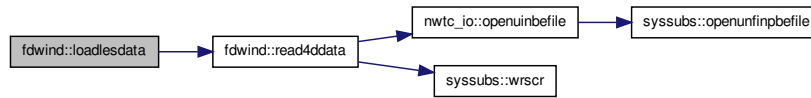
Here is the caller graph for this function:



3.12.2.17 subroutine `fdwind::loadlesdata` ( integer, intent(in) *UnWind*, integer, intent(in) *FileNo*, integer, intent(in) *Indx*, integer, intent(out) *ErrStat* ) [private]

Definition at line 36662 of file `tempassembled.f90`.

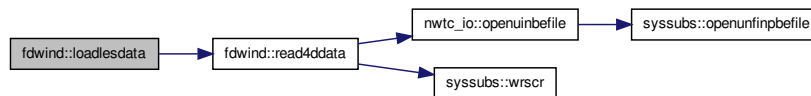
Here is the call graph for this function:



3.12.2.18 subroutine `fdwind::loadlesdata` ( integer, intent(in) *UnWind*, integer, intent(in) *FileNo*, integer, intent(in) *Indx*, integer, intent(out) *ErrStat* ) [private]

Definition at line 22792 of file `tempassembled.f90`.

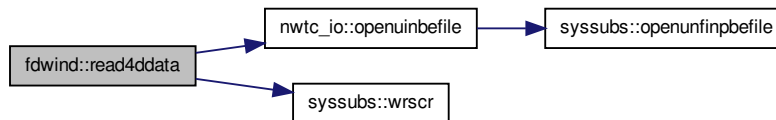
Here is the call graph for this function:



3.12.2.19 subroutine `fdwind::read4ddata` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, real(reki), dimension (:,::,:), intent(inout) *Comp*, integer, intent(in) *Indx4*, real(reki), intent(in) *Scale*, real(reki), intent(in) *Offset*, integer, intent(out) *ErrStat* ) [private]

Definition at line 36699 of file `tempassembled.f90`.

Here is the call graph for this function:

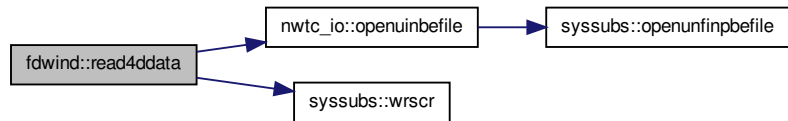


3.12.2.20 subroutine `fdwind::read4ddata` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, real(reki), dimension (:,::,:), intent(inout) *Comp*, integer, intent(in) *Indx4*, real(reki), intent(in) *Scale*, real(reki), intent(in) *Offset*, integer, intent(out) *ErrStat* ) [private]

Definition at line 22829 of file `tempassembled.f90`.

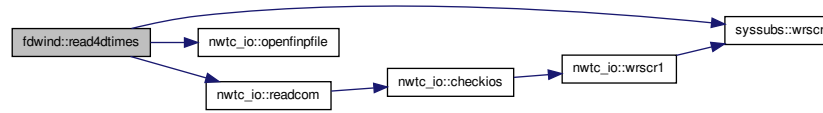
```
graph LR; fdwind::read4ddata --> nwtc_io::openuinbefile; fdwind::read4ddata --> syssubs::wrscri; nwtc_io::openuinbefile --> syssubs::openunfinpbefile;
```

Here is the call graph for this function:



Definition at line 36548 of file tempassembled.f90.

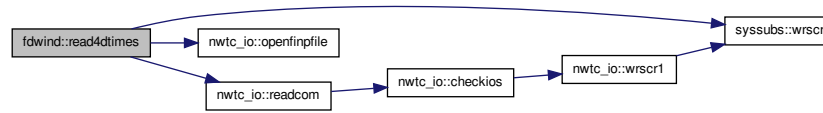
Here is the call graph for this function:



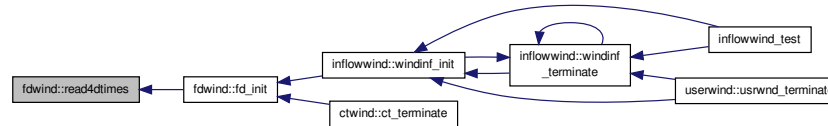
**3.12.2.23** subroutine `fdwind::read4dtimes` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, integer, intent(out) *ErrStat* ) [private]

Definition at line 8808 of file `tempassembled.f90`.

Here is the call graph for this function:



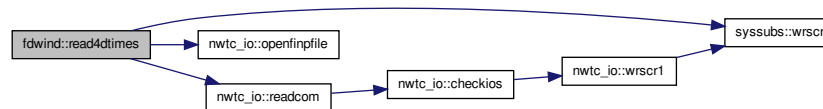
Here is the caller graph for this function:



**3.12.2.24** subroutine `fdwind::read4dtimes` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, integer, intent(out) *ErrStat* ) [private]

Definition at line 22678 of file `tempassembled.f90`.

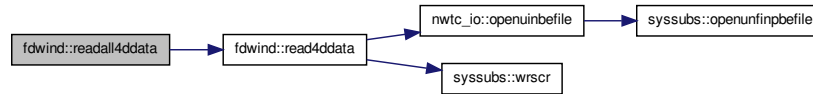
Here is the call graph for this function:



### 3.12.2.25 subroutine fdwind::readall4ddata ( integer, intent(in) *UnWind*, integer, intent(out) *ErrStat* ) [private]

Definition at line 36627 of file tempassembled.f90.

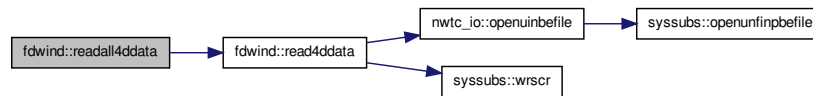
Here is the call graph for this function:



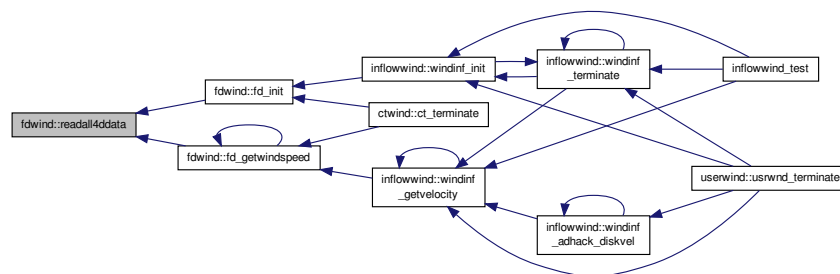
### 3.12.2.26 subroutine fdwind::readall4ddata ( integer, intent(in) *UnWind*, integer, intent(out) *ErrStat* ) [private]

Definition at line 8887 of file tempassembled.f90.

Here is the call graph for this function:



Here is the caller graph for this function:

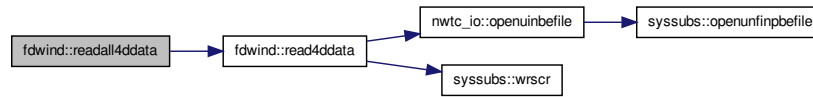


### 3.12.2.27 subroutine fdwind::readall4ddata ( integer, intent(in) *UnWind*, integer, intent(out) *ErrStat* ) [private]

Definition at line 22757 of file tempassembled.f90.



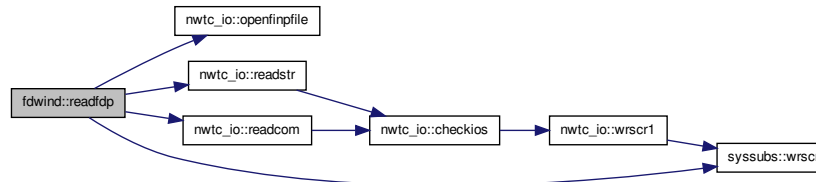
Here is the call graph for this function:



**3.12.2.28** subroutine `fdwind::readfdp` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, character(\*), intent(out) *FDTsfile*, integer, intent(out) *ErrStat* ) [private]

Definition at line 36287 of file `tempassembled.f90`.

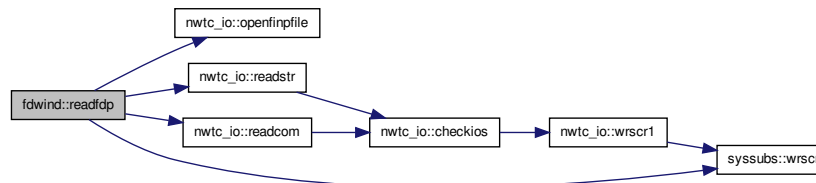
Here is the call graph for this function:



**3.12.2.29** subroutine `fdwind::readfdp` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, character(\*), intent(out) *FDTsfile*, integer, intent(out) *ErrStat* ) [private]

Definition at line 22417 of file `tempassembled.f90`.

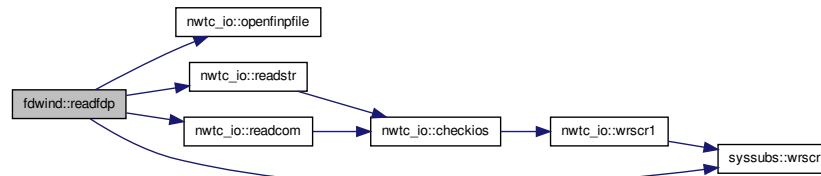
Here is the call graph for this function:



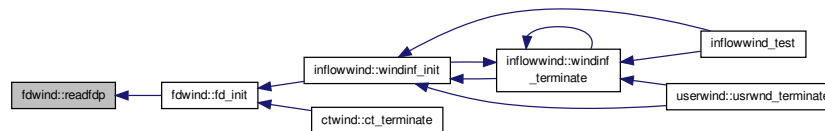
**3.12.2.30** subroutine `fdwind::readfdp` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, character(\*), intent(out) *FDTsfile*, integer, intent(out) *ErrStat* ) [private]

Definition at line 8547 of file `tempassembled.f90`.

Here is the call graph for this function:



Here is the caller graph for this function:



### 3.12.3 Member Data Documentation

#### 3.12.3.1 logical fdwind::advect [private]

Definition at line 8287 of file tempassembled.f90.

#### 3.12.3.2 character(5), dimension (:), allocatable fdwind::advfiles [private]

Definition at line 8292 of file tempassembled.f90.

#### 3.12.3.3 real(reki) fdwind::delxgrid [private]

Definition at line 8230 of file tempassembled.f90.

#### 3.12.3.4 real(reki) fdwind::delygrid [private]

Definition at line 8231 of file tempassembled.f90.

#### 3.12.3.5 real(reki) fdwind::delzgrid [private]

Definition at line 8232 of file tempassembled.f90.

#### 3.12.3.6 integer fdwind::fd\_df\_x [private]

Definition at line 8262 of file tempassembled.f90.

#### 3.12.3.7 integer fdwind::fd\_df\_y [private]

Definition at line 8263 of file tempassembled.f90.

3.12.3.8 integer fdwind::fd\_df\_z [private]

Definition at line 8264 of file tempassembled.f90.

3.12.3.9 integer fdwind::fdfileno [private]

Definition at line 8265 of file tempassembled.f90.

3.12.3.10 real(reki) fdwind::fdper [private]

Definition at line 8233 of file tempassembled.f90.

3.12.3.11 integer fdwind::fdrecl [private]

Definition at line 8266 of file tempassembled.f90.

3.12.3.12 character(1024) fdwind::fdspath [private]

Definition at line 8293 of file tempassembled.f90.

3.12.3.13 real(reki), dimension (2) fdwind::fdtime [private]

Definition at line 8234 of file tempassembled.f90.

3.12.3.14 real(reki), dimension (:,::,:), allocatable fdwind::fdu [private]

Definition at line 8235 of file tempassembled.f90.

3.12.3.15 real(reki), dimension (:,::,:), allocatable fdwind::fdudata [private]

Definition at line 8238 of file tempassembled.f90.

3.12.3.16 integer fdwind::fdunit [private]

Definition at line 8285 of file tempassembled.f90.

3.12.3.17 real(reki), dimension (:,::,:), allocatable fdwind::fdv [private]

Definition at line 8236 of file tempassembled.f90.

3.12.3.18 real(reki), dimension (:,::,:), allocatable fdwind::fdvdata [private]

Definition at line 8239 of file tempassembled.f90.

3.12.3.19 real(reki), dimension (:,::,:), allocatable fdwind::fdw [private]

Definition at line 8237 of file tempassembled.f90.

3.12.3.20 real(reki), dimension (:,::,:), allocatable fdwind::fdwdata [private]

Definition at line 8240 of file tempassembled.f90.

3.12.3.21 integer fdwind::ind4dadv [private]

Definition at line 8267 of file tempassembled.f90.

3.12.3.22 integer fdwind::ind4dnew [private]

Definition at line 8268 of file tempassembled.f90.

3.12.3.23 integer fdwind::ind4dold [private]

Definition at line 8269 of file tempassembled.f90.

3.12.3.24 logical save fdwind::initialized = .FALSE. [private]

Definition at line 8290 of file tempassembled.f90.

3.12.3.25 real(reki) fdwind::lx [private]

Definition at line 8241 of file tempassembled.f90.

3.12.3.26 real(reki) fdwind::ly [private]

Definition at line 8242 of file tempassembled.f90.

3.12.3.27 real(reki) fdwind::lz [private]

Definition at line 8243 of file tempassembled.f90.

3.12.3.28 integer fdwind::num4dt [private]

Definition at line 8270 of file tempassembled.f90.

3.12.3.29 integer parameter fdwind::num4dtd = 2 [private]

Definition at line 8271 of file tempassembled.f90.

3.12.3.30 integer fdwind::num4dx [private]

Definition at line 8272 of file tempassembled.f90.

3.12.3.31 integer fdwind::num4dxd [private]

Definition at line 8273 of file tempassembled.f90.

3.12.3.32 integer fdwind::num4dxd1 [private]

Definition at line 8274 of file tempassembled.f90.

3.12.3.33 integer fdwind::num4dy [private]

Definition at line 8275 of file tempassembled.f90.

3.12.3.34 integer fdwind::num4dyd [private]

Definition at line 8276 of file tempassembled.f90.

3.12.3.35 integer fdwind::num4dyd1 [private]

Definition at line 8277 of file tempassembled.f90.

3.12.3.36 integer fdwind::num4dz [private]

Definition at line 8278 of file tempassembled.f90.

3.12.3.37 integer fdwind::num4dzd [private]

Definition at line 8279 of file tempassembled.f90.

3.12.3.38 integer fdwind::num4dzd1 [private]

Definition at line 8280 of file tempassembled.f90.

3.12.3.39 integer fdwind::numadvect [private]

Definition at line 8281 of file tempassembled.f90.

3.12.3.40 real(reki), dimension (3) fdwind::offsets [private]

Definition at line 8244 of file tempassembled.f90.

3.12.3.41 real(reki), save fdwind::prevtime [private]

Definition at line 8245 of file tempassembled.f90.

3.12.3.42 real(reki) fdwind::rotdiam [private]

Definition at line 8246 of file tempassembled.f90.

3.12.3.43 real(reki) fdwind::scalelevel [private]

Definition at line 8248 of file tempassembled.f90.

3.12.3.44 real(reki), dimension (3) fdwind::scalfact [private]

Definition at line 8247 of file tempassembled.f90.

3.12.3.45 integer fdwind::shft4dnew [private]

Definition at line 8282 of file tempassembled.f90.

3.12.3.46 real(reki) fdwind::t\_4d\_en [private]

Definition at line 8252 of file tempassembled.f90.

3.12.3.47 real(reki) fdwind::t\_4d\_st [private]

Definition at line 8253 of file tempassembled.f90.

3.12.3.48 real(reki), dimension (:), allocatable fdwind::times4d [private]

Definition at line 8249 of file tempassembled.f90.

3.12.3.49 integer, dimension (:), allocatable fdwind::times4dix [private]

Definition at line 8283 of file tempassembled.f90.

3.12.3.50 `real(reki) fdwind::tm_max [private]`

Definition at line 8250 of file `tempassembled.f90`.

3.12.3.51 `real(reki) fdwind::tsclfact [private]`

Definition at line 8251 of file `tempassembled.f90`.

3.12.3.52 `logical fdwind::vertshft [private]`

Definition at line 8288 of file `tempassembled.f90`.

3.12.3.53 `real(reki) fdwind::xmax [private]`

Definition at line 8254 of file `tempassembled.f90`.

3.12.3.54 `real(reki) fdwind::xt [private]`

Definition at line 8255 of file `tempassembled.f90`.

3.12.3.55 `real(reki) fdwind::ymax [private]`

Definition at line 8256 of file `tempassembled.f90`.

3.12.3.56 `real(reki) fdwind::yt [private]`

Definition at line 8257 of file `tempassembled.f90`.

3.12.3.57 `real(reki) fdwind::zmax [private]`

Definition at line 8258 of file `tempassembled.f90`.

3.12.3.58 `real(reki) fdwind::zref [private]`

Definition at line 8260 of file `tempassembled.f90`.

3.12.3.59 `real(reki) fdwind::zt [private]`

Definition at line 8259 of file `tempassembled.f90`.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

### 3.13 ffwind::ff\_getvalue Interface Reference

#### Private Member Functions

- `real(reki) function ff_getrvalue (RVarName, ErrStat)`
- `real(reki) function ff_getvalue (RVarName, ErrStat)`
- `real(reki) function ff_getvalue (RVarName, ErrStat)`

#### 3.13.1 Detailed Description

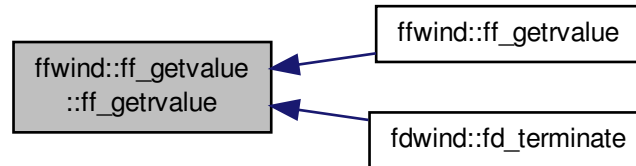
Definition at line 9523 of file `tempassembled.f90`.

## 3.13.2 Member Function/Subroutine Documentation

3.13.2.1 `real(reki) function ffwind::ff_getvalue::ff_getrvalue ( character(*), intent(in) RVarName, integer, intent(out) ErrStat )`  
`[private]`

Definition at line 11078 of file tempassembled.f90.

Here is the caller graph for this function:



3.13.2.2 `real(reki) function ffwind::ff_getvalue::ff_getrvalue ( character(*), intent(in) RVarName, integer, intent(out) ErrStat )`  
`[private]`

Definition at line 38818 of file tempassembled.f90.

3.13.2.3 `real(reki) function ffwind::ff_getvalue::ff_getrvalue ( character(*), intent(in) RVarName, integer, intent(out) ErrStat )`  
`[private]`

Definition at line 24948 of file tempassembled.f90.

The documentation for this interface was generated from the following file:

- [tempassembled.f90](#)

## 3.14 ffwind Module Reference

## Data Types

- interface [ff\\_getvalue](#)

## Public Member Functions

- subroutine, public [ff\\_init](#) (UnWind, BinFile, ErrStat)
- type(inflintrpout) function, public [ff\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [ff\\_terminate](#) (ErrStat)
- subroutine, public [ff\\_init](#) (UnWind, BinFile, ErrStat)
- type(inflintrpout) function, public [ff\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [ff\\_terminate](#) (ErrStat)
- subroutine, public [ff\\_init](#) (UnWind, BinFile, ErrStat)
- type(inflintrpout) function, public [ff\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [ff\\_terminate](#) (ErrStat)

## Private Member Functions

- subroutine [read\\_bladed\\_ff\\_header0](#) (UnWind, ErrStat)
- subroutine [read\\_bladed\\_ff\\_header1](#) (UnWind, TI, ErrStat)
- subroutine [read\\_bladed\\_grids](#) (UnWind, Cwise, TI, ErrStat)
- subroutine [read\\_summary\\_ff](#) (UnWind, FileName, Cwise, ZCenter, TI, ErrStat)
- subroutine [read\\_turbsim\\_ff](#) (UnWind, WindFile, ErrStat)
- subroutine [read\\_ff\\_tower](#) (UnWind, WindFile, ErrStat)
- real(reki) function [ff\\_getrvalue](#) (RVarName, ErrStat)
- real(reki) function, dimension(3) [ff\\_interp](#) (Time, Position, ErrStat)
- subroutine [read\\_bladed\\_ff\\_header0](#) (UnWind, ErrStat)
- subroutine [read\\_bladed\\_ff\\_header1](#) (UnWind, TI, ErrStat)
- subroutine [read\\_bladed\\_grids](#) (UnWind, Cwise, TI, ErrStat)
- subroutine [read\\_summary\\_ff](#) (UnWind, FileName, Cwise, ZCenter, TI, ErrStat)
- subroutine [read\\_turbsim\\_ff](#) (UnWind, WindFile, ErrStat)
- subroutine [read\\_ff\\_tower](#) (UnWind, WindFile, ErrStat)
- real(reki) function [ff\\_getrvalue](#) (RVarName, ErrStat)
- real(reki) function, dimension(3) [ff\\_interp](#) (Time, Position, ErrStat)
- subroutine [read\\_bladed\\_ff\\_header0](#) (UnWind, ErrStat)
- subroutine [read\\_bladed\\_ff\\_header1](#) (UnWind, TI, ErrStat)
- subroutine [read\\_bladed\\_grids](#) (UnWind, Cwise, TI, ErrStat)
- subroutine [read\\_summary\\_ff](#) (UnWind, FileName, Cwise, ZCenter, TI, ErrStat)
- subroutine [read\\_turbsim\\_ff](#) (UnWind, WindFile, ErrStat)
- subroutine [read\\_ff\\_tower](#) (UnWind, WindFile, ErrStat)
- real(reki) function [ff\\_getrvalue](#) (RVarName, ErrStat)
- real(reki) function, dimension(3) [ff\\_interp](#) (Time, Position, ErrStat)

## Private Attributes

- real(reki), dimension(:,:,:), allocatable [ffdata](#)
- real(reki), dimension(:,:,:), allocatable [fftower](#)
- real(reki) [ffdttime](#)
- real(reki) [ffrate](#)
- real(reki) [ffyhwid](#)
- real(reki) [ffzhwid](#)
- real(reki) [refht](#)
- real(reki) [gridbase](#)
- real(reki) [initxposition](#)
- real(reki) [invffyd](#)
- real(reki) [invffzd](#)
- real(reki) [invmffws](#)
- real(reki) [meanffws](#)
- real(reki) [totaltime](#)
- integer [nffcomp](#)
- integer [nffsteps](#)
- integer [nygrids](#)
- integer [nzgrids](#)
- integer [ntgrids](#)
- logical, save [initialized](#) = .FALSE.
- logical [periodic](#) = .FALSE.



## 3.14.1 Detailed Description

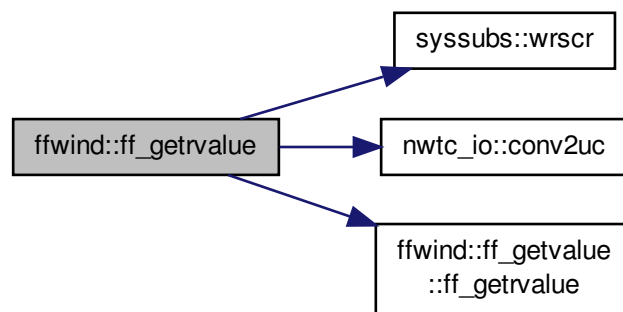
Definition at line 9475 of file tempassembled.f90.

## 3.14.2 Member Function/Subroutine Documentation

3.14.2.1 `real(reki) function ffwind::ff_getrvalue ( character(*), intent(in) RVarName, integer, intent(out) ErrStat ) [private]`

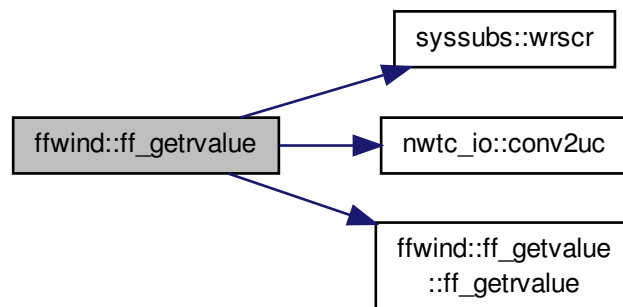
Definition at line 11078 of file tempassembled.f90.

Here is the call graph for this function:

3.14.2.2 `real(reki) function ffwind::ff_getrvalue ( character(*), intent(in) RVarName, integer, intent(out) ErrStat ) [private]`

Definition at line 24948 of file tempassembled.f90.

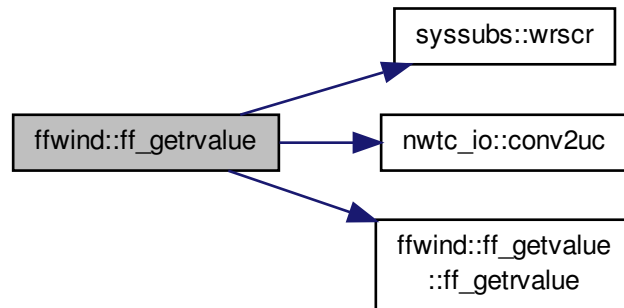
Here is the call graph for this function:



3.14.2.3 `real(reki) function ffwind::ff_getrvalue ( character(*), intent(in) RVarName, integer, intent(out) ErrStat ) [private]`

Definition at line 38818 of file `tempassembled.f90`.

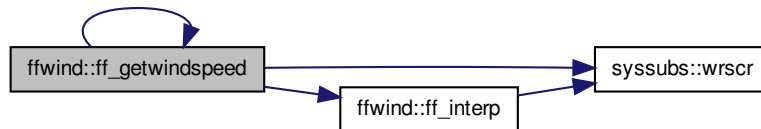
Here is the call graph for this function:



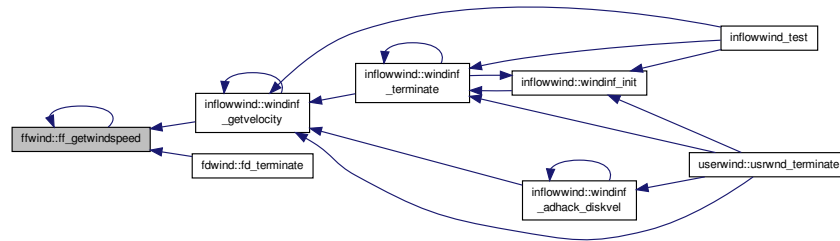
3.14.2.4 `type(inflintrpout) function, public ffwind::ff_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 11133 of file `tempassembled.f90`.

Here is the call graph for this function:



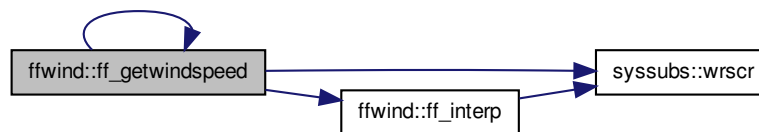
Here is the caller graph for this function:



3.14.2.5 `type(inflintrpout)` function, public `ffwind::ff_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 25003 of file tempassembled.f90.

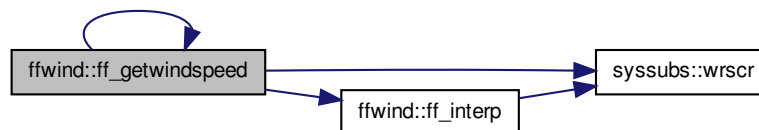
Here is the call graph for this function:



3.14.2.6 `type(inflintrpout)` function, public `ffwind::ff_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 38873 of file tempassembled.f90.

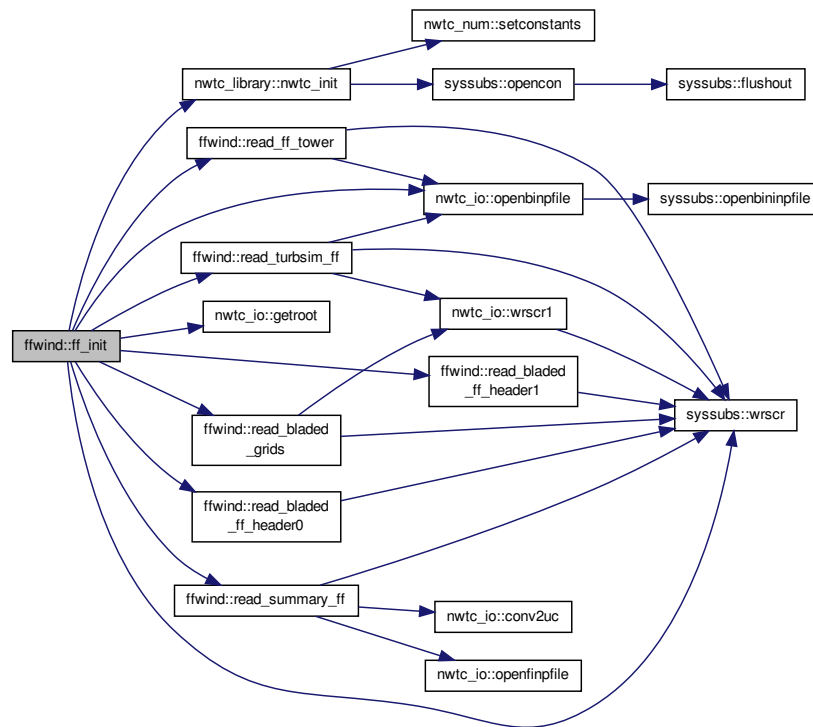
Here is the call graph for this function:



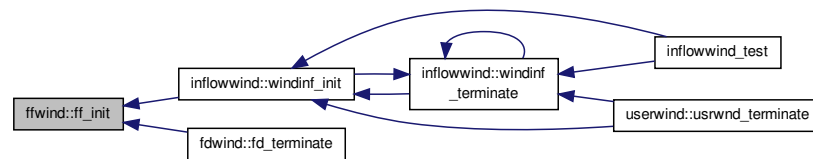
### 3.14.2.7 subroutine, public `ffwind::ff_init ( integer, intent(in) UnWind, character(*), intent(in) BinFile, integer, intent(out) ErrStat )`

Definition at line 9535 of file tempassembled.f90.

Here is the call graph for this function:



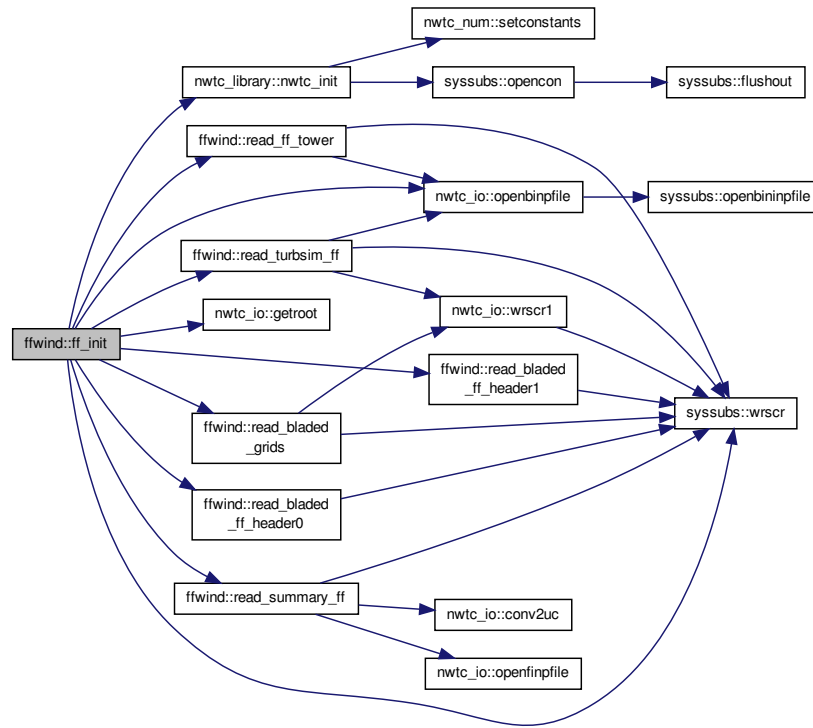
Here is the caller graph for this function:



3.14.2.8 subroutine, public ffwind::ff\_init ( integer, intent(in) *UnWind*, character(\*), intent(in) *BinFile*, integer, intent(out) *ErrStat* )

Definition at line 37275 of file tempassembled.f90.

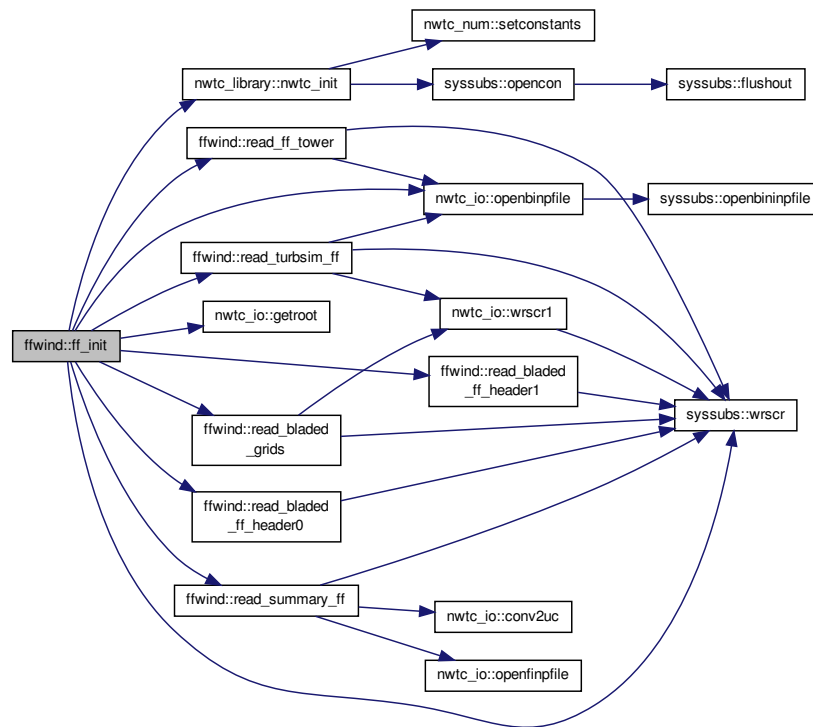
Here is the call graph for this function:



3.14.2.9 subroutine, public `ffwind::ff_init ( integer, intent(in) UnWind, character(*), intent(in) BinFile, integer, intent(out) ErrStat )`

Definition at line 23405 of file `tempassembled.f90`.

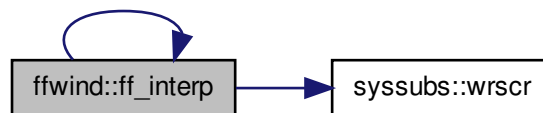
Here is the call graph for this function:



3.14.2.10 `real(reki) function, dimension(3) ffwind::ff_interp ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) Position, integer, intent(out) ErrStat ) [private]`

Definition at line 38935 of file `tempassembled.f90`.

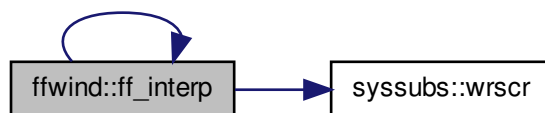
Here is the call graph for this function:



3.14.2.11 `real(reki) function, dimension(3) ffwind::ff_interp ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) Position, integer, intent(out) ErrStat ) [private]`

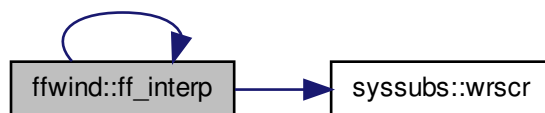
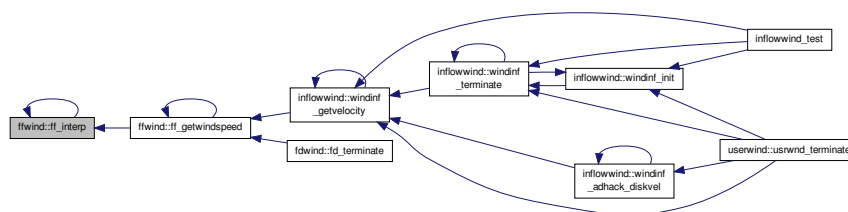
Definition at line 11195 of file `tempassembled.f90`.

Here is the caller graph for this function:



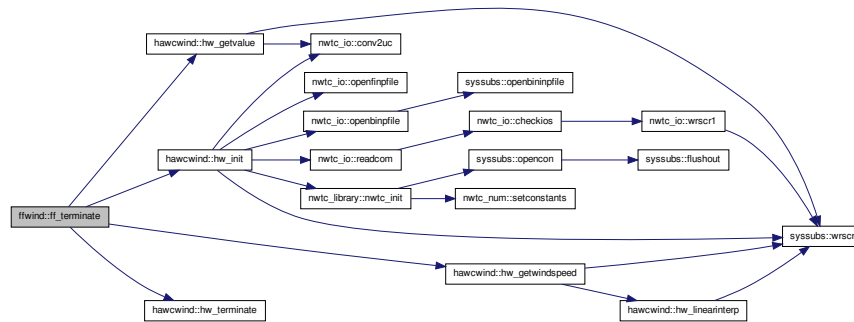
```
3.14.2.12 real(reki) function, dimension(3) ffwind::ffw_interp ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) Position, integer, intent(out) ErrStat ) [private]
```

Here is the call graph for this function:



Definition at line 39236 of file tempassembled.f90.

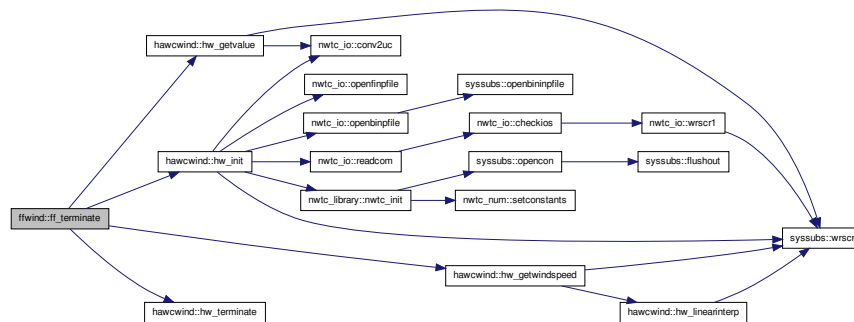
Here is the call graph for this function:



#### 3.14.2.14 subroutine, public ffwind::ff\_terminate ( integer, intent(out) ErrStat )

Definition at line 25366 of file tempassembled.f90.

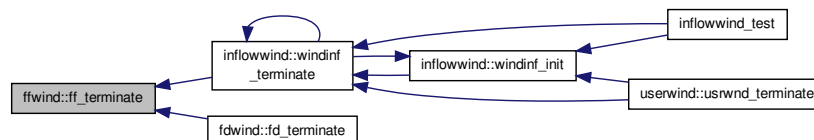
Here is the call graph for this function:



#### 3.14.2.15 subroutine, public ffwind::ff\_terminate ( integer, intent(out) ErrStat )

Definition at line 11496 of file tempassembled.f90.

Here is the caller graph for this function:

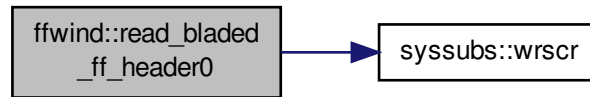




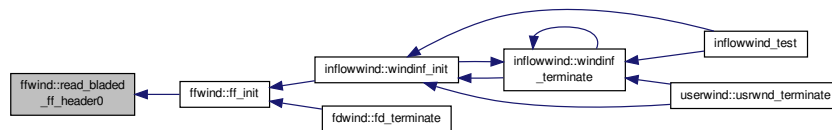
3.14.2.16 subroutine ffwind::read\_bladed\_ff\_header0 ( integer, intent(in) *UnWind*, integer, intent(out) *ErrStat* ) [private]

Definition at line 9715 of file tempassembled.f90.

Here is the call graph for this function:



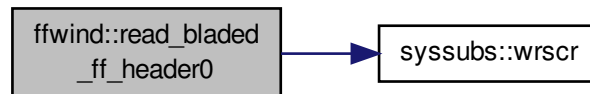
Here is the caller graph for this function:



3.14.2.17 subroutine ffwind::read\_bladed\_ff\_header0 ( integer, intent(in) *UnWind*, integer, intent(out) *ErrStat* ) [private]

Definition at line 23585 of file tempassembled.f90.

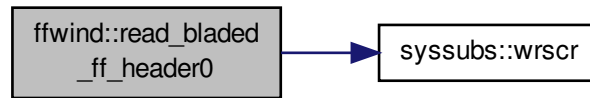
Here is the call graph for this function:



3.14.2.18 subroutine ffwind::read\_bladed\_ff\_header0 ( integer, intent(in) *UnWind*, integer, intent(out) *ErrStat* ) [private]

Definition at line 37455 of file tempassembled.f90.

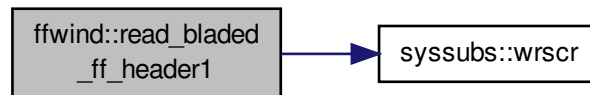
Here is the call graph for this function:



3.14.2.19 subroutine `ffwind::read_bladed_ff_header1` ( integer, intent(in) *UnWind*, real(reki), dimension(3), intent(out) *TI*, integer, intent(out) *ErrStat* ) [private]

Definition at line 37595 of file `tempassembled.f90`.

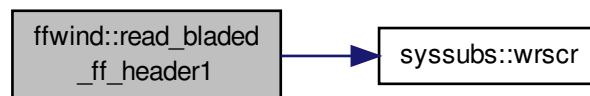
Here is the call graph for this function:



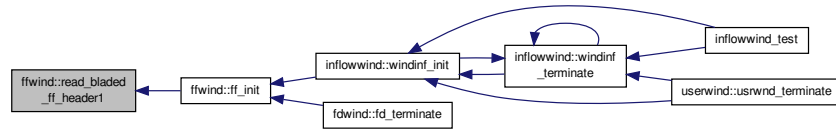
3.14.2.20 subroutine `ffwind::read_bladed_ff_header1` ( integer, intent(in) *UnWind*, real(reki), dimension(3), intent(out) *TI*, integer, intent(out) *ErrStat* ) [private]

Definition at line 9855 of file `tempassembled.f90`.

Here is the call graph for this function:



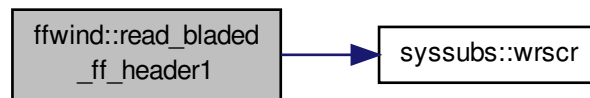
Here is the caller graph for this function:



**3.14.2.21** subroutine `ffwind::read_bladed_ff_header1` ( integer, intent(in) *UnWind*, real(reki), dimension(3), intent(out) *Tl*, integer, intent(out) *ErrStat* ) [private]

Definition at line 23725 of file `tempassembled.f90`.

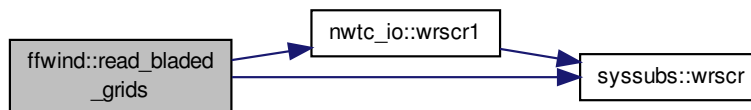
Here is the call graph for this function:



**3.14.2.22** subroutine `ffwind::read_bladed_grids` ( integer, intent(in) *UnWind*, logical, intent(in) *CWise*, real(reki), dimension (3), intent(in) *Tl*, integer, intent(out) *ErrStat* ) [private]

Definition at line 24065 of file `tempassembled.f90`.

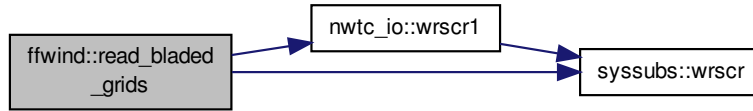
Here is the call graph for this function:



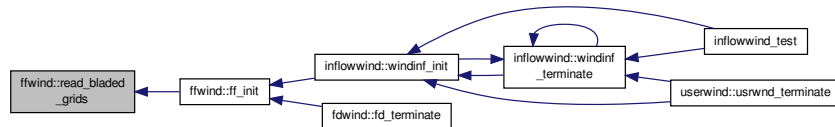
**3.14.2.23** subroutine `ffwind::read_bladed_grids` ( integer, intent(in) *UnWind*, logical, intent(in) *CWise*, real(reki), dimension (3), intent(in) *Tl*, integer, intent(out) *ErrStat* ) [private]

Definition at line 10195 of file `tempassembled.f90`.

Here is the call graph for this function:



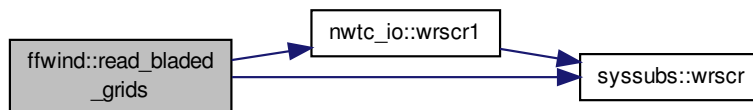
Here is the caller graph for this function:



**3.14.2.24** subroutine `ffwind::read_bladed_grids` ( integer, intent(in) *UnWind*, logical, intent(in) *CWise*, real(reki), dimension (3), intent(in) *Tl*, integer, intent(out) *ErrStat* ) [*private*]

Definition at line 37935 of file `tempassembled.f90`.

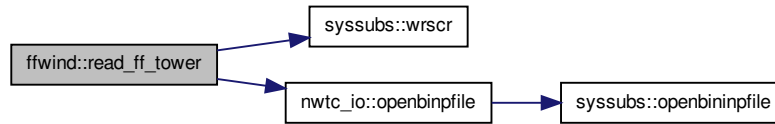
Here is the call graph for this function:



**3.14.2.25** subroutine `ffwind::read_ff_tower` ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, integer, intent(out) *ErrStat* ) [*private*]

Definition at line 24743 of file `tempassembled.f90`.

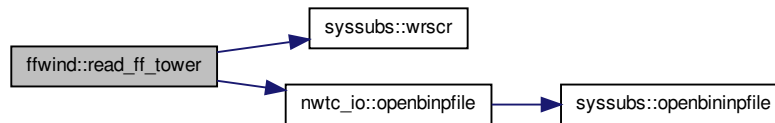
Here is the call graph for this function:



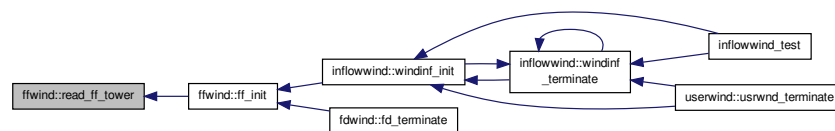
3.14.2.26 subroutine `ffwind::read_ff_tower` ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, integer, intent(out) *ErrStat* ) [private]

Definition at line 10873 of file `tempassembled.f90`.

Here is the call graph for this function:



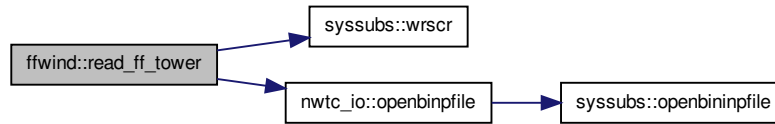
Here is the caller graph for this function:



3.14.2.27 subroutine `ffwind::read_ff_tower` ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, integer, intent(out) *ErrStat* ) [private]

Definition at line 38613 of file `tempassembled.f90`.

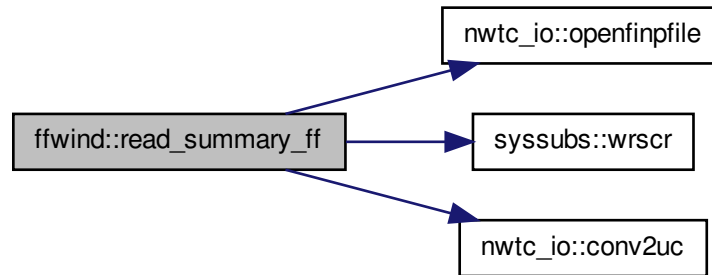
Here is the call graph for this function:



3.14.2.28 subroutine `ffwind::read_summary_ff` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, logical, intent(out) *CWise*, real(reki), intent(out) *ZCenter*, real(reki), dimension (3), intent(out) *TI*, integer, intent(out) *ErrStat* )  
[private]

Definition at line 24203 of file `tempassembled.f90`.

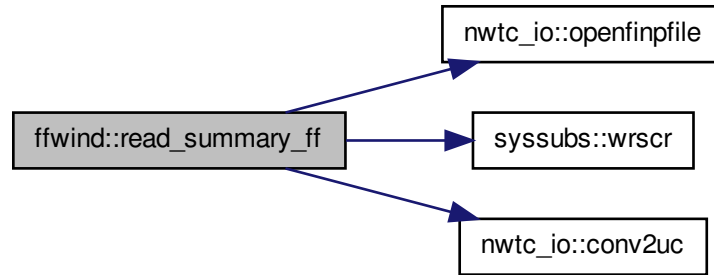
Here is the call graph for this function:



3.14.2.29 subroutine `ffwind::read_summary_ff` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, logical, intent(out) *CWise*, real(reki), intent(out) *ZCenter*, real(reki), dimension (3), intent(out) *TI*, integer, intent(out) *ErrStat* )  
[private]

Definition at line 38073 of file `tempassembled.f90`.

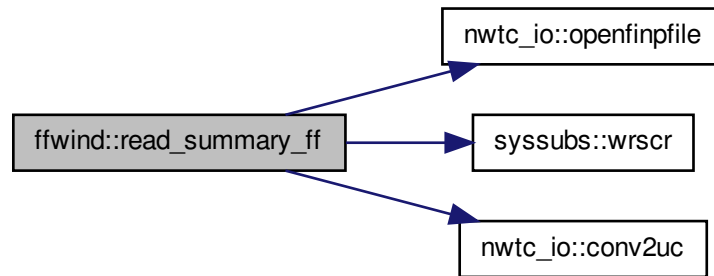
Here is the call graph for this function:



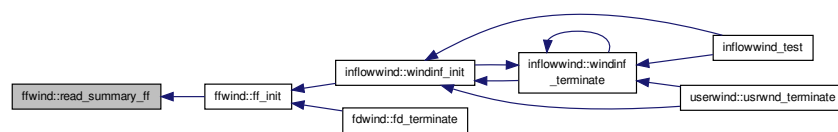
3.14.2.30 subroutine `ffwind::read_summary_ff` ( integer, intent(in) *UnWind*, character(\*), intent(in) *FileName*, logical, intent(out) *CWise*, real(reki), intent(out) *ZCenter*, real(reki), dimension (3), intent(out) *TI*, integer, intent(out) *ErrStat* )  
[private]

Definition at line 10333 of file `tempassembled.f90`.

Here is the call graph for this function:



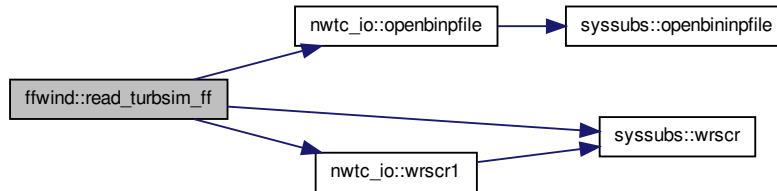
Here is the caller graph for this function:



3.14.2.31 subroutine ffwind::read\_turbsim\_ff ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, integer, intent(out) *ErrStat* ) [private]

Definition at line 24437 of file tempassembled.f90.

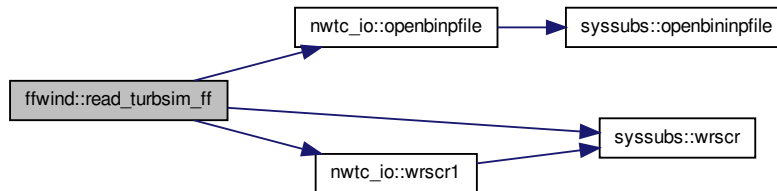
Here is the call graph for this function:



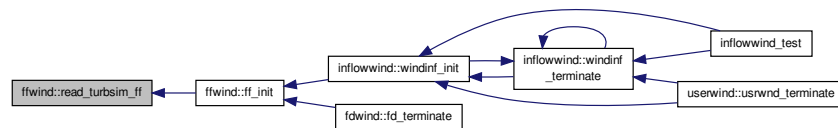
3.14.2.32 subroutine ffwind::read\_turbsim\_ff ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, integer, intent(out) *ErrStat* ) [private]

Definition at line 10567 of file tempassembled.f90.

Here is the call graph for this function:



Here is the caller graph for this function:

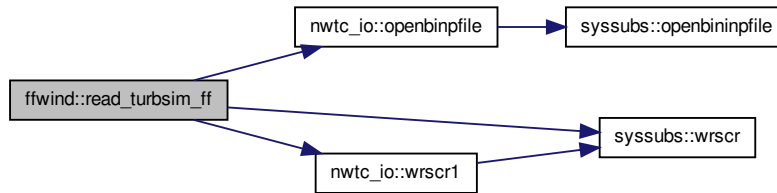


3.14.2.33 subroutine ffwind::read\_turbsim\_ff ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, integer, intent(out) *ErrStat* ) [private]

Definition at line 38307 of file tempassembled.f90.



Here is the call graph for this function:



### 3.14.3 Member Data Documentation

#### 3.14.3.1 `real(reki), dimension (:,:,), allocatable ffwind::ffdata [private]`

Definition at line 9497 of file `tempassembled.f90`.

#### 3.14.3.2 `real(reki) ffwind::ffdtime [private]`

Definition at line 9500 of file `tempassembled.f90`.

#### 3.14.3.3 `real(reki) ffwind::ffrate [private]`

Definition at line 9501 of file `tempassembled.f90`.

#### 3.14.3.4 `real(reki), dimension (:,:,), allocatable ffwind::fftower [private]`

Definition at line 9498 of file `tempassembled.f90`.

#### 3.14.3.5 `real(reki) ffwind::ffyhwid [private]`

Definition at line 9502 of file `tempassembled.f90`.

#### 3.14.3.6 `real(reki) ffwind::ffzhwid [private]`

Definition at line 9503 of file `tempassembled.f90`.

#### 3.14.3.7 `real(reki) ffwind::gridbase [private]`

Definition at line 9505 of file `tempassembled.f90`.

#### 3.14.3.8 `logical save ffwind::initialized = .FALSE. [private]`

Definition at line 9519 of file `tempassembled.f90`.

#### 3.14.3.9 `real(reki) ffwind::initxposition [private]`

Definition at line 9506 of file `tempassembled.f90`.

#### 3.14.3.10 `real(reki) ffwind::invffyd [private]`

Definition at line 9507 of file `tempassembled.f90`.

3.14.3.11 `real(reki) ffwind::invffzd` [private]

Definition at line 9508 of file `tempassembled.f90`.

3.14.3.12 `real(reki) ffwind::invmffws` [private]

Definition at line 9509 of file `tempassembled.f90`.

3.14.3.13 `real(reki) ffwind::meanffws` [private]

Definition at line 9510 of file `tempassembled.f90`.

3.14.3.14 `integer ffwind::nffcomp` [private]

Definition at line 9513 of file `tempassembled.f90`.

3.14.3.15 `integer ffwind::nffsteps` [private]

Definition at line 9514 of file `tempassembled.f90`.

3.14.3.16 `integer ffwind::ntgrids` [private]

Definition at line 9517 of file `tempassembled.f90`.

3.14.3.17 `integer ffwind::nygrids` [private]

Definition at line 9515 of file `tempassembled.f90`.

3.14.3.18 `integer ffwind::nzgrids` [private]

Definition at line 9516 of file `tempassembled.f90`.

3.14.3.19 `logical ffwind::periodic = .FALSE.` [private]

Definition at line 9520 of file `tempassembled.f90`.

3.14.3.20 `real(reki) ffwind::refht` [private]

Definition at line 9504 of file `tempassembled.f90`.

3.14.3.21 `real(reki) ffwind::totaltime` [private]

Definition at line 9511 of file `tempassembled.f90`.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

## 3.15 hawcwind Module Reference

### Public Member Functions

- subroutine, public [hw\\_init](#) (UnWind, InpFileName, ErrStat)
- `real(reki)` function, public [hw\\_getvalue](#) (RVarName, ErrStat)
- `type(inflintrpout)` function, public [hw\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [hw\\_terminate](#) (ErrStat)

- subroutine, public [hw\\_init](#) (UnWind, InpFileName, ErrStat)
- real(reki) function, public [hw\\_getvalue](#) (RVarName, ErrStat)
- type(inflintrpout) function, public [hw\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [hw\\_terminate](#) (ErrStat)
- subroutine, public [hw\\_init](#) (UnWind, InpFileName, ErrStat)
- real(reki) function, public [hw\\_getvalue](#) (RVarName, ErrStat)
- type(inflintrpout) function, public [hw\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [hw\\_terminate](#) (ErrStat)

#### Private Member Functions

- real(reki) function, dimension(3) [hw\\_linearinterp](#) (Time, Position, ErrStat)
- real(reki) function, dimension(3) [hw\\_linearinterp](#) (Time, Position, ErrStat)
- real(reki) function, dimension(3) [hw\\_linearinterp](#) (Time, Position, ErrStat)

#### Private Attributes

- real(reki), dimension(:,:,:), allocatable [winddata](#)
- real(reki) [deltaxinv](#)
- real(reki) [deltayinv](#)
- real(reki) [deltazinv](#)
- integer, parameter [nc](#) = 3
- integer [nx](#)
- integer [ny](#)
- integer [nz](#)
- real(reki) [gridbase](#)
- real(reki) [lengthx](#)
- real(reki) [lengthyhalf](#)
- real(reki) [refht](#)
- real(reki) [uref](#)
- logical, save [initialized](#) = .FALSE.

#### 3.15.1 Detailed Description

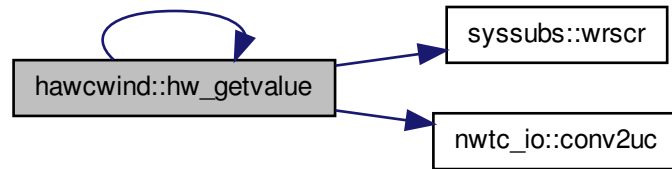
Definition at line 11515 of file tempassembled.f90.

#### 3.15.2 Member Function/Subroutine Documentation

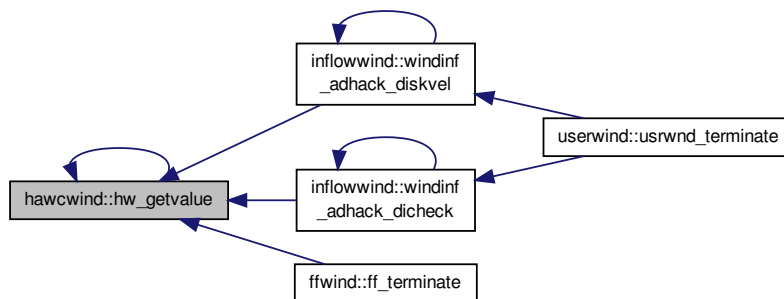
##### 3.15.2.1 real(reki) function, public hawcwind::hw\_getvalue ( character(\*), intent(in) *RVarName*, integer, intent(out) *ErrStat* )

Definition at line 11884 of file tempassembled.f90.

Here is the call graph for this function:



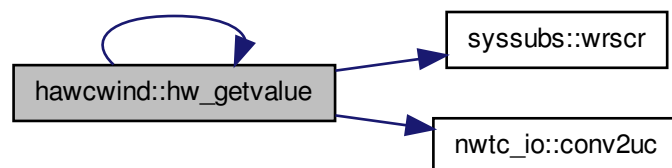
Here is the caller graph for this function:



3.15.2.2 `real(reki)` function, `public hawcwind::hw_getvalue ( character(*), intent(in) RVarName, integer, intent(out) ErrStat )`

Definition at line 25754 of file `tempassembled.f90`.

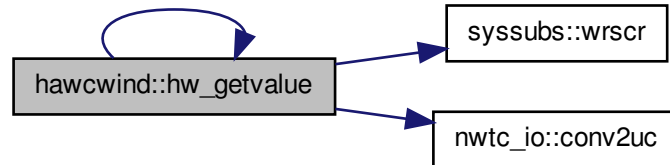
Here is the call graph for this function:



3.15.2.3 `real(reki)` function, public `hawcwind::hw_getvalue ( character(*), intent(in) RVarName, integer, intent(out) ErrStat )`

Definition at line 39624 of file `tempassembled.f90`.

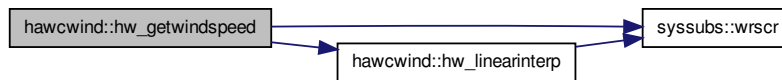
Here is the call graph for this function:



3.15.2.4 `type(inflintrpout)` function, public `hawcwind::hw_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 25809 of file `tempassembled.f90`.

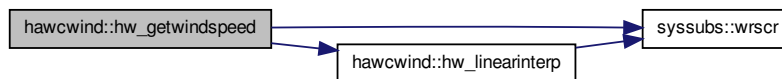
Here is the call graph for this function:



3.15.2.5 `type(inflintrpout)` function, public `hawcwind::hw_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 39679 of file `tempassembled.f90`.

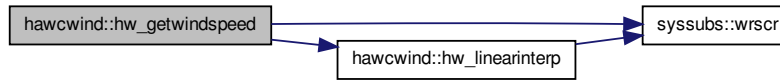
Here is the call graph for this function:



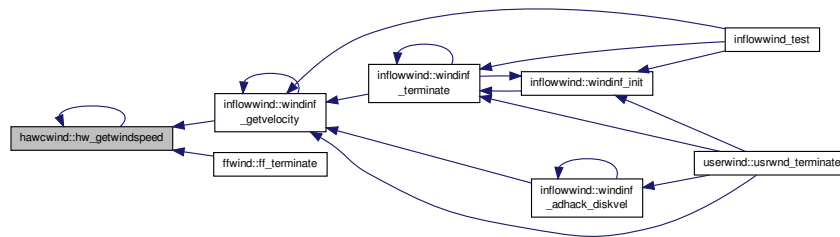
3.15.2.6 `type(inflintrpout) function, public hawcwind::hw_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 11939 of file `tempassembled.f90`.

Here is the call graph for this function:



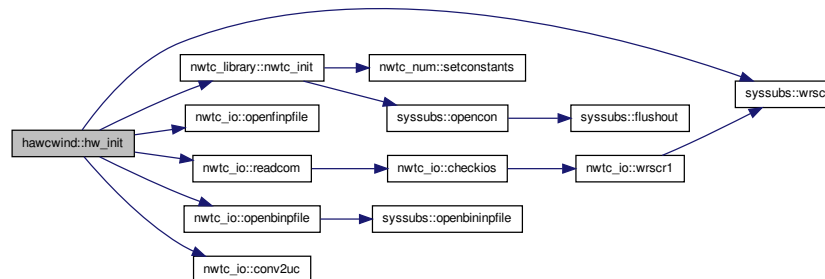
Here is the caller graph for this function:



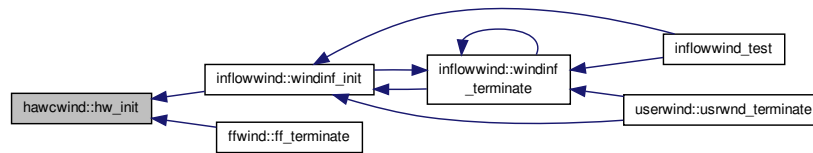
3.15.2.7 `subroutine, public hawcwind::hw_init ( integer, intent(in) UnWind, character(*), intent(in) InpFileName, integer, intent(out) ErrStat )`

Definition at line 11563 of file `tempassembled.f90`.

Here is the call graph for this function:



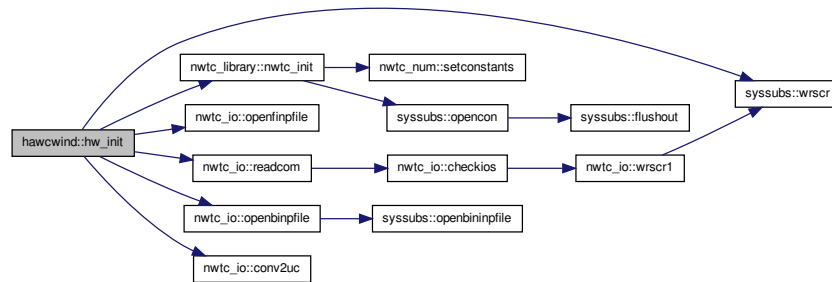
Here is the caller graph for this function:



**3.15.2.8** subroutine, public hawcwind::hw\_init ( integer, intent(in) *UnWind*, character(\*), intent(in) *InpFileName*, integer, intent(out) *ErrStat* )

Definition at line 39303 of file tempassembled.f90.

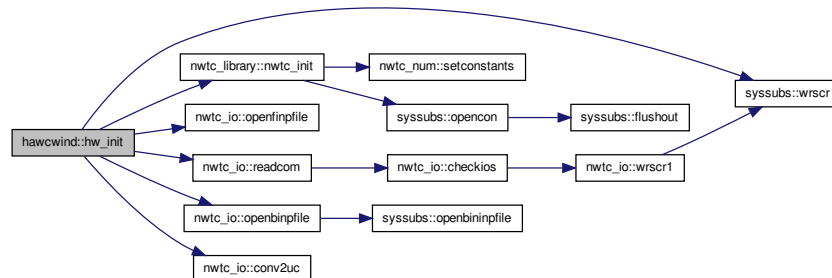
Here is the call graph for this function:



**3.15.2.9** subroutine, public hawcwind::hw\_init ( integer, intent(in) *UnWind*, character(\*), intent(in) *InpFileName*, integer, intent(out) *ErrStat* )

Definition at line 25433 of file tempassembled.f90.

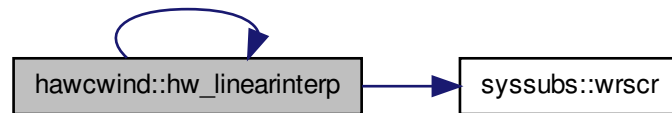
Here is the call graph for this function:



3.15.2.10 **real(reki) function, dimension(3) hawcwind::hw\_linearinterp ( real(reki), intent(in) *Time*, real(reki), dimension(3), intent(in) *Position*, integer, intent(out) *ErrStat* ) [private]**

Definition at line 25843 of file tempassembled.f90.

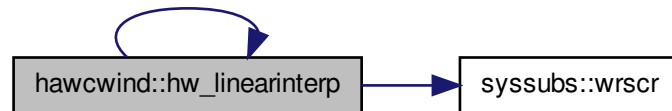
Here is the call graph for this function:



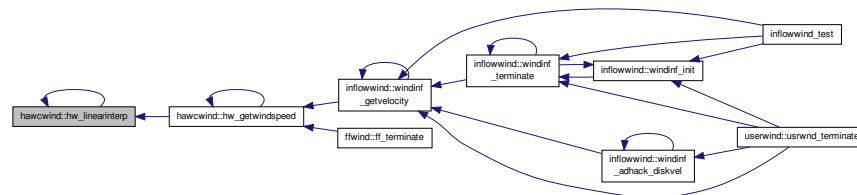
3.15.2.11 **real(reki) function, dimension(3) hawcwind::hw\_linearinterp ( real(reki), intent(in) *Time*, real(reki), dimension(3), intent(in) *Position*, integer, intent(out) *ErrStat* ) [private]**

Definition at line 11973 of file tempassembled.f90.

Here is the call graph for this function:



Here is the caller graph for this function:

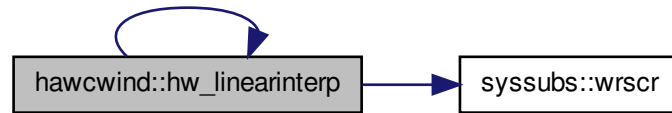


3.15.2.12 **real(reki) function, dimension(3) hawcwind::hw\_linearinterp ( real(reki), intent(in) *Time*, real(reki), dimension(3), intent(in) *Position*, integer, intent(out) *ErrStat* ) [private]**

Definition at line 39713 of file tempassembled.f90.



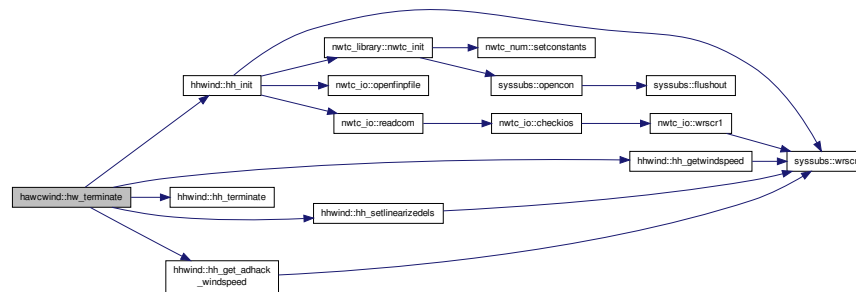
Here is the call graph for this function:



### 3.15.2.13 subroutine, public hawcwind::hw\_terminate ( integer, intent(out) *ErrStat* )

Definition at line 39918 of file `tempassembled.f90`.

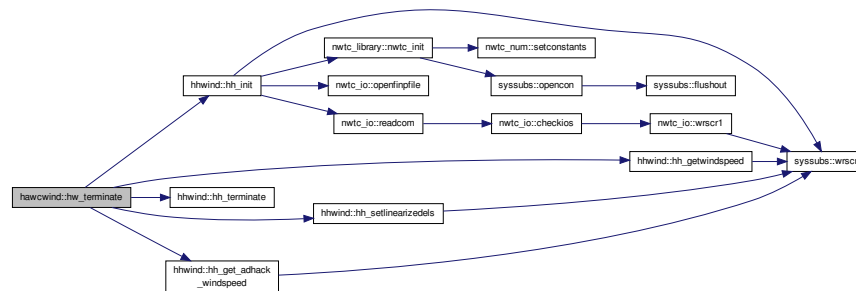
Here is the call graph for this function:



### 3.15.2.14 subroutine, public hawcwind::hw\_terminate ( integer, intent(out) *ErrStat* )

Definition at line 26048 of file `tempassembled.f90`.

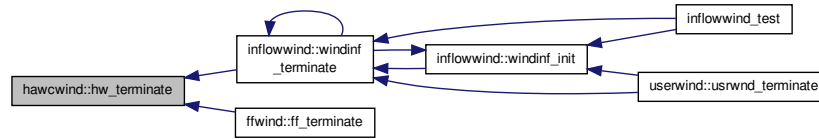
Here is the call graph for this function:



### 3.15.2.15 subroutine, public hawcwind::hw\_terminate ( integer, intent(out) ErrStat )

Definition at line 12178 of file tempassembled.f90.

Here is the caller graph for this function:



## 3.15.3 Member Data Documentation

### 3.15.3.1 `real(reki) hawcwind::deltaxinv` [private]

Definition at line 11537 of file tempassembled.f90.

### 3.15.3.2 `real(reki) hawcwind::deltayinv` [private]

Definition at line 11538 of file tempassembled.f90.

### 3.15.3.3 `real(reki) hawcwind::deltazinv` [private]

Definition at line 11539 of file tempassembled.f90.

### 3.15.3.4 `real(reki) hawcwind::gridbase` [private]

Definition at line 11546 of file tempassembled.f90.

### 3.15.3.5 `logical save hawcwind::initialized = .FALSE.` [private]

Definition at line 11553 of file tempassembled.f90.

### 3.15.3.6 `real(reki) hawcwind::lengthx` [private]

Definition at line 11547 of file tempassembled.f90.

### 3.15.3.7 `real(reki) hawcwind::lengthyhalf` [private]

Definition at line 11548 of file tempassembled.f90.

### 3.15.3.8 `integer parameter hawcwind::nc = 3` [private]

Definition at line 11541 of file tempassembled.f90.

### 3.15.3.9 `integer hawcwind::nx` [private]

Definition at line 11542 of file tempassembled.f90.

### 3.15.3.10 `integer hawcwind::ny` [private]

Definition at line 11543 of file tempassembled.f90.

#### 3.15.3.11 integer hawcwind::nz [private]

Definition at line 11544 of file tempassembled.f90.

#### 3.15.3.12 real(reki) hawcwind::refht [private]

Definition at line 11549 of file tempassembled.f90.

#### 3.15.3.13 real(reki) hawcwind::uref [private]

Definition at line 11550 of file tempassembled.f90.

#### 3.15.3.14 real(reki), dimension (:,:,,:), allocatable hawcwind::winddata [private]

Definition at line 11535 of file tempassembled.f90.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

### 3.16 hhwind::hh\_info Type Reference

#### Public Attributes

- real(reki) [referenceheight](#)
- real(reki) [width](#)

#### 3.16.1 Detailed Description

Definition at line 12244 of file tempassembled.f90.

#### 3.16.2 Member Data Documentation

##### 3.16.2.1 real(reki) hhwind::hh\_info::referenceheight

Definition at line 12245 of file tempassembled.f90.

##### 3.16.2.2 real(reki) hhwind::hh\_info::width

Definition at line 12246 of file tempassembled.f90.

The documentation for this type was generated from the following file:

- [tempassembled.f90](#)

### 3.17 hhwind Module Reference

#### Data Types

- type [hh\\_info](#)

## Public Member Functions

- subroutine, public [hh\\_init](#) (UnWind, WindFile, WindInfo, ErrStat)
- type(inflintrpout) function, public [hh\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- type(inflintrpout) function, public [hh\\_get\\_adhack\\_windspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [hh\\_setlinearizedels](#) (Perturbations, ErrStat)
- subroutine, public [hh\\_terminate](#) (ErrStat)
- subroutine, public [hh\\_init](#) (UnWind, WindFile, WindInfo, ErrStat)
- type(inflintrpout) function, public [hh\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- type(inflintrpout) function, public [hh\\_get\\_adhack\\_windspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [hh\\_setlinearizedels](#) (Perturbations, ErrStat)
- subroutine, public [hh\\_terminate](#) (ErrStat)
- subroutine, public [hh\\_init](#) (UnWind, WindFile, WindInfo, ErrStat)
- type(inflintrpout) function, public [hh\\_getwindspeed](#) (Time, InputPosition, ErrStat)
- type(inflintrpout) function, public [hh\\_get\\_adhack\\_windspeed](#) (Time, InputPosition, ErrStat)
- subroutine, public [hh\\_setlinearizedels](#) (Perturbations, ErrStat)
- subroutine, public [hh\\_terminate](#) (ErrStat)

## Private Attributes

- real(reki), dimension(:), allocatable [tdata](#)
- real(reki), dimension(:), allocatable [delta](#)
- real(reki), dimension(:), allocatable [v](#)
- real(reki), dimension(:), allocatable [vz](#)
- real(reki), dimension(:), allocatable [hshr](#)
- real(reki), dimension(:), allocatable [vshr](#)
- real(reki), dimension(:), allocatable [vlinshr](#)
- real(reki), dimension(:), allocatable [vgust](#)
- real(reki), dimension(7) [linearizedels](#)
- real(reki) [refht](#)
- real(reki) [refwid](#)
- integer [numdatalines](#)
- integer, save [timeindx](#) = 0
- logical, save [linearize](#) = .FALSE.

## 3.17.1 Detailed Description

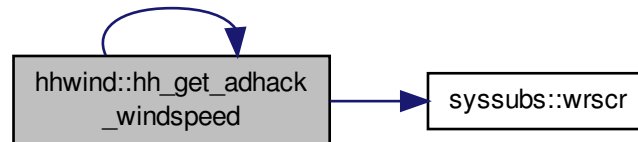
Definition at line 12195 of file tempassembled.f90.

## 3.17.2 Member Function/Subroutine Documentation

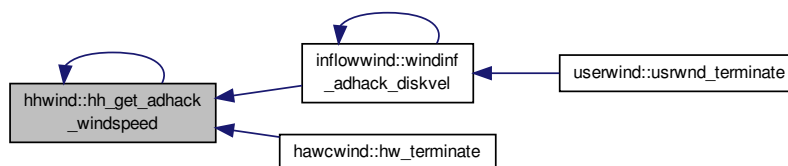
3.17.2.1 `type(inflintrpout) function, public hhwind::hh_get_adhack_windspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 12655 of file `tempassembled.f90`.

Here is the call graph for this function:



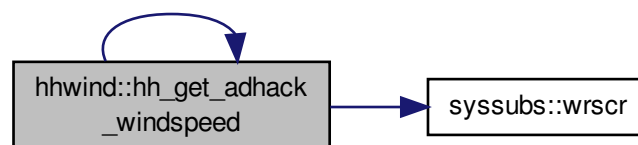
Here is the caller graph for this function:



3.17.2.2 `type(inflintrpout) function, public hhwind::hh_get_adhack_windspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 26525 of file `tempassembled.f90`.

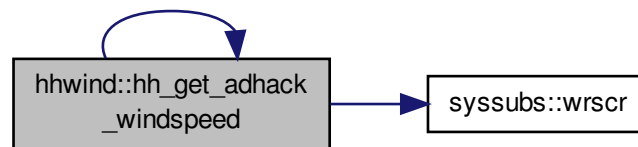
Here is the call graph for this function:



3.17.2.3 `type(inflintrpout) function, public hhwind::hh_get_adhack_windspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 40395 of file `tempassembled.f90`.

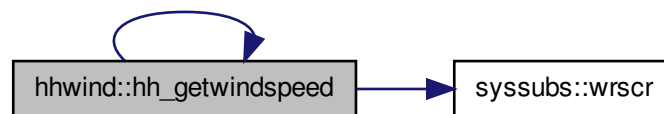
Here is the call graph for this function:



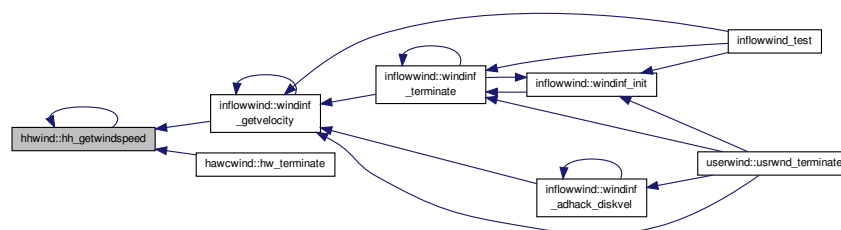
3.17.2.4 `type(inflintrpout) function, public hhwind::hh_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 12524 of file `tempassembled.f90`.

Here is the call graph for this function:



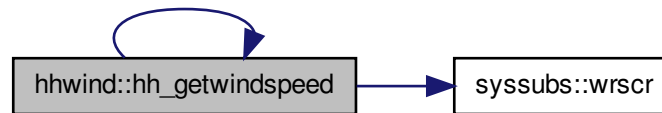
Here is the caller graph for this function:



3.17.2.5 `type(inflintrpout) function, public hhwind::hh_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 40264 of file `tempassembled.f90`.

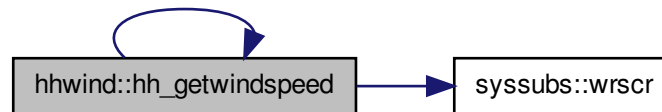
Here is the call graph for this function:



3.17.2.6 `type(inflintrpout) function, public hhwind::hh_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 26394 of file `tempassembled.f90`.

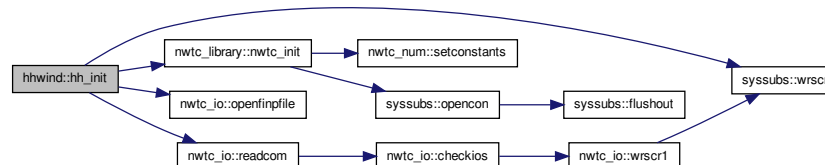
Here is the call graph for this function:



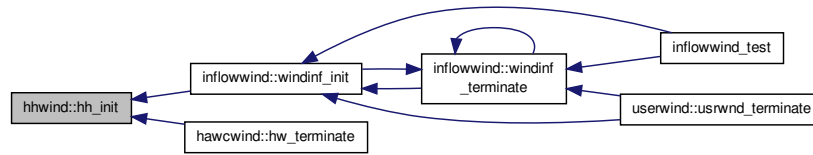
3.17.2.7 `subroutine, public hhwind::hh_init ( integer, intent(in) UnWind, character(*), intent(in) WindFile, type(hh_info), intent(in) WindInfo, integer, intent(out) ErrStat )`

Definition at line 12257 of file `tempassembled.f90`.

Here is the call graph for this function:



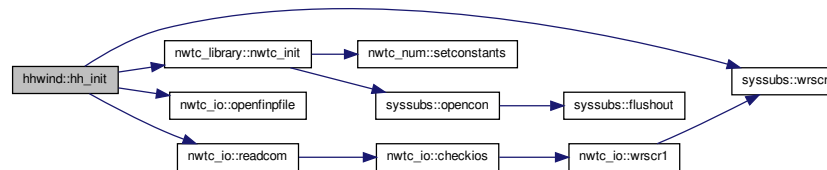
Here is the caller graph for this function:



**3.17.2.8** subroutine, public hhwind::hh\_init ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, type(hh\_info), intent(in) *WindInfo*, integer, intent(out) *ErrStat* )

Definition at line 39997 of file tempassembled.f90.

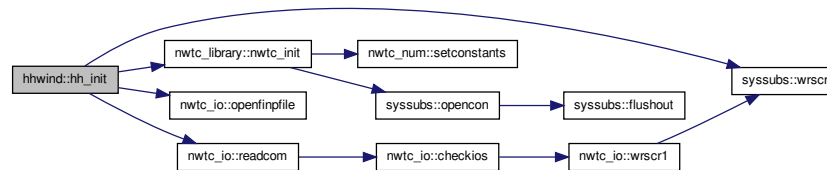
Here is the call graph for this function:



**3.17.2.9** subroutine, public hhwind::hh\_init ( integer, intent(in) *UnWind*, character(\*), intent(in) *WindFile*, type(hh\_info), intent(in) *WindInfo*, integer, intent(out) *ErrStat* )

Definition at line 26127 of file tempassembled.f90.

Here is the call graph for this function:



**3.17.2.10** subroutine, public hhwind::hh\_setlinearizedels ( real(reki), dimension(7), intent(in) *Perturbations*, integer, intent(out) *ErrStat* )

Definition at line 26618 of file tempassembled.f90.



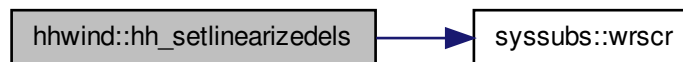
Here is the call graph for this function:



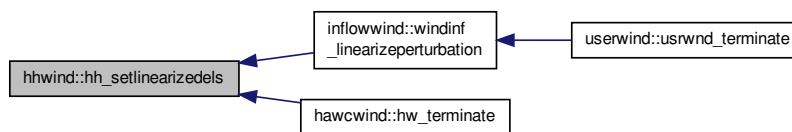
3.17.2.11 subroutine, public hhwind::hh\_setlinearizedels ( real(reki), dimension(7), intent(in) *Perturbations*, integer, intent(out) *ErrStat* )

Definition at line 12748 of file tempassembled.f90.

Here is the call graph for this function:



Here is the caller graph for this function:



3.17.2.12 subroutine, public hhwind::hh\_setlinearizedels ( real(reki), dimension(7), intent(in) *Perturbations*, integer, intent(out) *ErrStat* )

Definition at line 40488 of file tempassembled.f90.

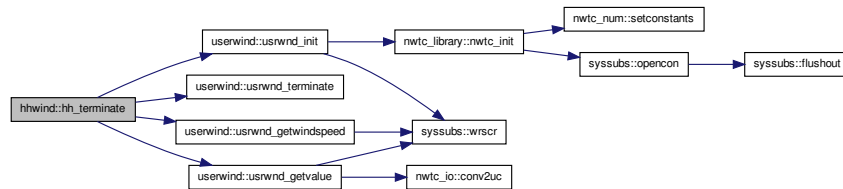
Here is the call graph for this function:



### 3.17.2.13 subroutine, public hhwind::hh\_terminate ( integer, intent(out) ErrStat )

Definition at line 40514 of file tempassembled.f90.

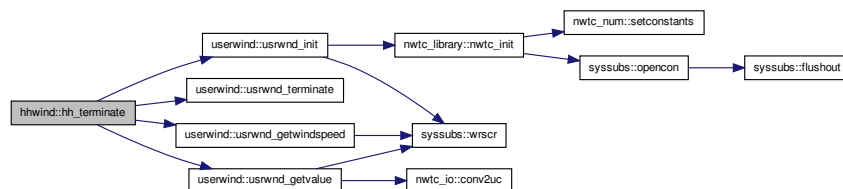
Here is the call graph for this function:



### 3.17.2.14 subroutine, public hhwind::hh\_terminate ( integer, intent(out) ErrStat )

Definition at line 26644 of file tempassembled.f90.

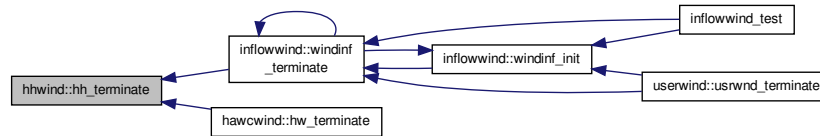
Here is the call graph for this function:



### 3.17.2.15 subroutine, public hhwind::hh\_terminate ( integer, intent(out) ErrStat )

Definition at line 12774 of file tempassembled.f90.

Here is the caller graph for this function:



### 3.17.3 Member Data Documentation

#### 3.17.3.1 `real(reki), dimension (:), allocatable hhwind::delta` [private]

Definition at line 12227 of file tempassembled.f90.

#### 3.17.3.2 `real(reki), dimension (:), allocatable hhwind::hshr` [private]

Definition at line 12230 of file tempassembled.f90.

#### 3.17.3.3 `logical save hhwind::linearize = .FALSE.` [private]

Definition at line 12242 of file tempassembled.f90.

#### 3.17.3.4 `real(reki), dimension(7) hhwind::linearizedels` [private]

Definition at line 12235 of file tempassembled.f90.

#### 3.17.3.5 `integer hhwind::numdatalines` [private]

Definition at line 12239 of file tempassembled.f90.

#### 3.17.3.6 `real(reki) hhwind::refht` [private]

Definition at line 12236 of file tempassembled.f90.

#### 3.17.3.7 `real(reki) hhwind::refwid` [private]

Definition at line 12237 of file tempassembled.f90.

#### 3.17.3.8 `real(reki), dimension (:), allocatable hhwind::tdata` [private]

Definition at line 12226 of file tempassembled.f90.

#### 3.17.3.9 `integer save hhwind::timeindx = 0` [private]

Definition at line 12240 of file tempassembled.f90.

#### 3.17.3.10 `real(reki), dimension (:), allocatable hhwind::v` [private]

Definition at line 12228 of file tempassembled.f90.

#### 3.17.3.11 `real(reki), dimension (:), allocatable hhwind::vgust` [private]

Definition at line 12233 of file tempassembled.f90.

**3.17.3.12** real(reki), dimension(:), allocatable hhwind::vlinshr [private]

Definition at line 12232 of file tempassembled.f90.

**3.17.3.13** real(reki), dimension (:), allocatable hhwind::vshr [private]

Definition at line 12231 of file tempassembled.f90.

**3.17.3.14** real(reki), dimension (:), allocatable hhwind::vz [private]

Definition at line 12229 of file tempassembled.f90.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

**3.18 inflowwind::inflinitinfo Type Reference****Public Attributes**

- character(1024) [windfilename](#)
- integer [windfiletype](#)
- real(reki) [referenceheight](#)
- real(reki) [width](#)

**3.18.1 Detailed Description**

Definition at line 13055 of file tempassembled.f90.

**3.18.2 Member Data Documentation****3.18.2.1** real(reki) inflowwind::inflinitinfo::referenceheight

Definition at line 13058 of file tempassembled.f90.

**3.18.2.2** real(reki) inflowwind::inflinitinfo::width

Definition at line 13059 of file tempassembled.f90.

**3.18.2.3** character(1024) inflowwind::inflinitinfo::windfilename

Definition at line 13056 of file tempassembled.f90.

**3.18.2.4** integer inflowwind::inflinitinfo::windfiletype

Definition at line 13057 of file tempassembled.f90.

The documentation for this type was generated from the following file:

- [tempassembled.f90](#)

**3.19 sharedinflowdefs::inflintrpout Type Reference**

## Public Attributes

- `real(reki), dimension(3)` [velocity](#)

## 3.19.1 Detailed Description

Definition at line 7195 of file `tempassembled.f90`.

## 3.19.2 Member Data Documentation

3.19.2.1 `real(reki), dimension(3)` `sharedinflowdefs::inflintrpout::velocity`

Definition at line 7196 of file `tempassembled.f90`.

The documentation for this type was generated from the following file:

- [tempassembled.f90](#)

## 3.20 inflowwind Module Reference

## Data Types

- type [inflinitinfo](#)

## Public Member Functions

- subroutine, public [windinf\\_init](#) (FileInfo, ErrStat)
- type(`inflintrpout`) function, public [windinf\\_getvelocity](#) (Time, InputPosition, ErrStat)
- subroutine, public [windinf\\_linearizeperturbation](#) (LinPerturbations, ErrStat)
- `real(reki)` function, dimension(3),  
public [windinf\\_adhack\\_diskvel](#) (Time, InpPosition, ErrStat)
- `real(reki)` function, public [windinf\\_adhack\\_dicheck](#) (ErrStat)
- subroutine, public [windinf\\_terminate](#) (ErrStat)
- subroutine, public [windinf\\_init](#) (FileInfo, ErrStat)
- type(`inflintrpout`) function, public [windinf\\_getvelocity](#) (Time, InputPosition, ErrStat)
- subroutine, public [windinf\\_linearizeperturbation](#) (LinPerturbations, ErrStat)
- `real(reki)` function, dimension(3),  
public [windinf\\_adhack\\_diskvel](#) (Time, InpPosition, ErrStat)
- `real(reki)` function, public [windinf\\_adhack\\_dicheck](#) (ErrStat)
- subroutine, public [windinf\\_terminate](#) (ErrStat)
- subroutine, public [windinf\\_init](#) (FileInfo, ErrStat)
- type(`inflintrpout`) function, public [windinf\\_getvelocity](#) (Time, InputPosition, ErrStat)
- subroutine, public [windinf\\_linearizeperturbation](#) (LinPerturbations, ErrStat)
- `real(reki)` function, dimension(3),  
public [windinf\\_adhack\\_diskvel](#) (Time, InpPosition, ErrStat)
- `real(reki)` function, public [windinf\\_adhack\\_dicheck](#) (ErrStat)
- subroutine, public [windinf\\_terminate](#) (ErrStat)

## Public Attributes

- character(99), parameter [windinfver](#) = 'InflowWind (v1.01.00b-bjj, 10-Aug-2012)'

## Private Member Functions

- integer function [getwindtype](#) (FileName, ErrStat)
- integer function [getwindtype](#) (FileName, ErrStat)
- integer function [getwindtype](#) (FileName, ErrStat)

## Private Attributes

- integer, save [windtype](#) = Undef\_Wind
- integer [unwind](#) = 91
- logical, save [ct\\_flag](#) = .FALSE.

## 3.20.1 Detailed Description

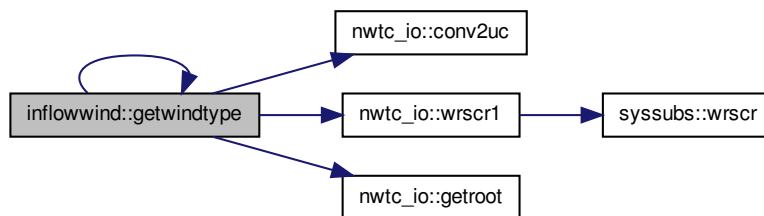
Definition at line 13008 of file tempassembled.f90.

## 3.20.2 Member Function/Subroutine Documentation

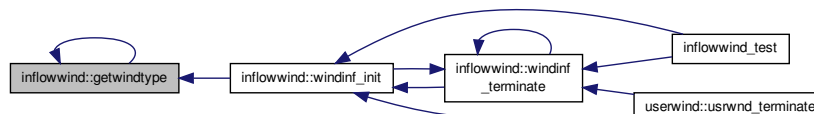
3.20.2.1 integer function inflowwind::getwindtype ( character(\*), intent(inout) *FileName*, integer, intent(out) *ErrStat* )  
[private]

Definition at line 13273 of file tempassembled.f90.

Here is the call graph for this function:



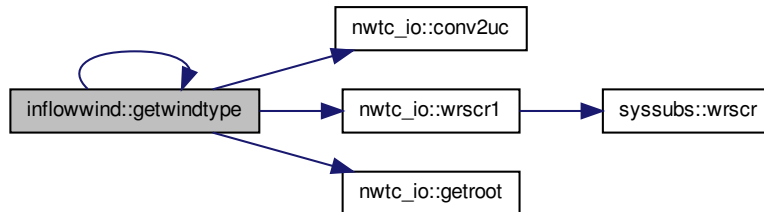
Here is the caller graph for this function:



3.20.2.2 integer function inflowwind::getwindtype ( character(\*), intent(inout) *FileName*, integer, intent(out) *ErrStat* )  
[private]

Definition at line 27143 of file tempassembled.f90.

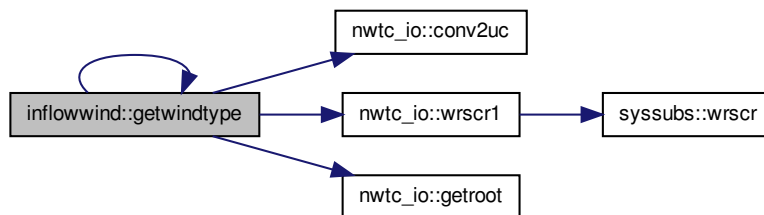
Here is the call graph for this function:



3.20.2.3 integer function inflowwind::getwindtype ( character(\*), intent(inout) *FileName*, integer, intent(out) *ErrStat* )  
[private]

Definition at line 41013 of file tempassembled.f90.

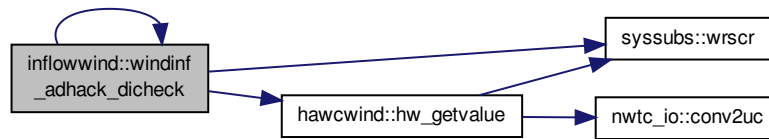
Here is the call graph for this function:



3.20.2.4 real(reki) function, public inflowwind::windinf\_adhack\_dicheck ( integer, intent(out) *ErrStat* )

Definition at line 41283 of file tempassembled.f90.

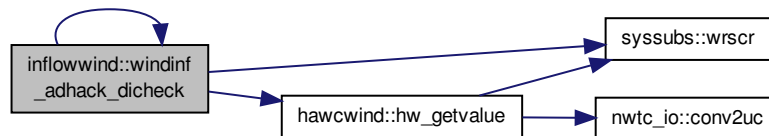
Here is the call graph for this function:



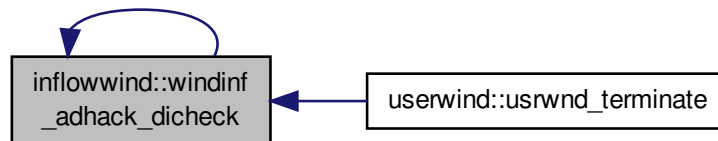
#### 3.20.2.5 `real(reki)` function, public `inflowwind::windinf_adhack_dicheck ( integer, intent(out) ErrStat )`

Definition at line 13543 of file `tempassembled.f90`.

Here is the call graph for this function:



Here is the caller graph for this function:

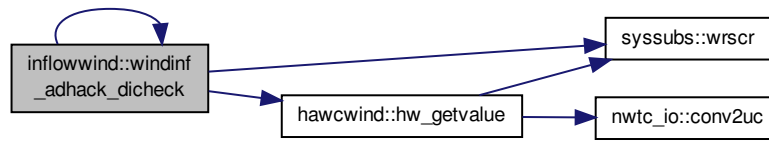


#### 3.20.2.6 `real(reki)` function, public `inflowwind::windinf_adhack_dicheck ( integer, intent(out) ErrStat )`

Definition at line 27413 of file `tempassembled.f90`.



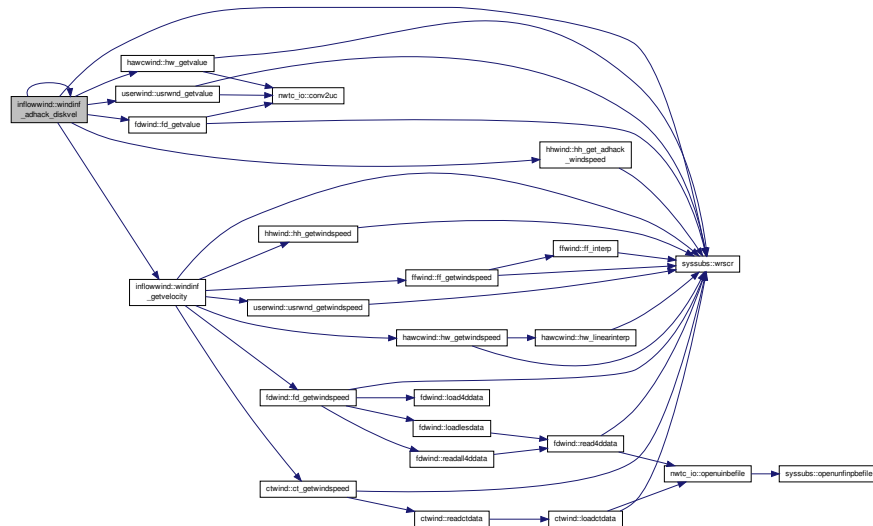
Here is the call graph for this function:



### 3.20.2.7 `real(reki)` function, dimension(3), public `inflowwind::windinf_adhack_diskvel ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InpPosition, integer, intent(out) ErrStat )`

Definition at line 41163 of file `tempassembled.f90`.

Here is the call graph for this function:



### 3.20.2.8 `real(reki)` function, dimension(3), public `inflowwind::windinf_adhack_diskvel ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InpPosition, integer, intent(out) ErrStat )`

Definition at line 13423 of file `tempassembled.f90`.

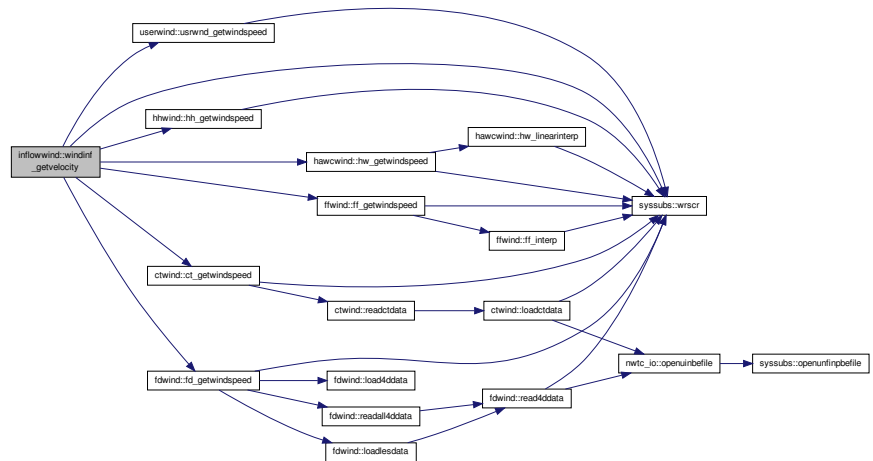
[illegible]

```
graph LR
    A[inflowwind::windinf_adhacker_diskvel] --> A
    B[userwind::usrwnd_terminate] --> A
```

Definition at line 27293 of file tempassembled.f90.

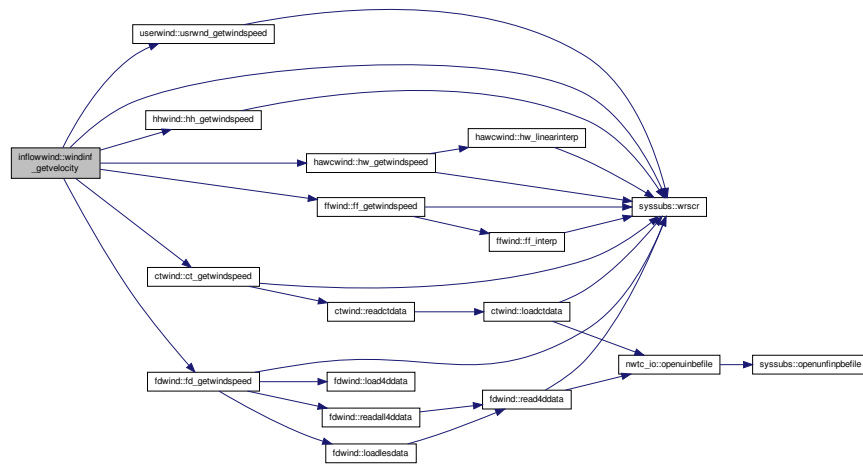
[illegible]

Here is the call graph for this function:



Definition at line 40950 of file tempassembled.f90.

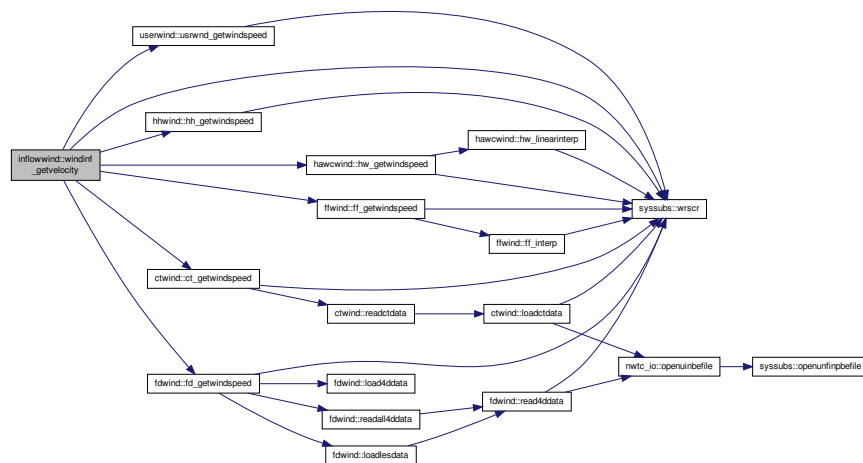
Here is the call graph for this function:



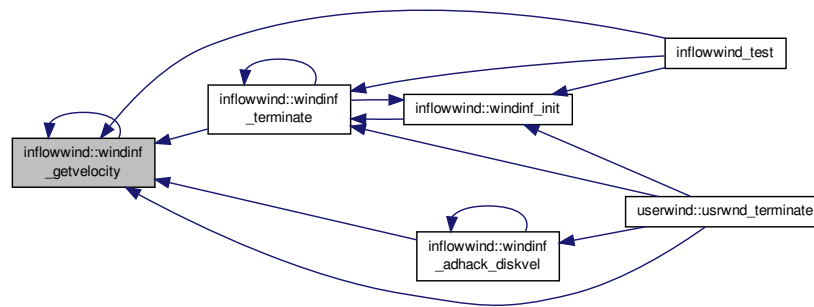
3.20.2.12 `type(inflintrpout) function, public inflowwind::windinf_getvelocity ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 13210 of file `tempassembled.f90`.

Here is the call graph for this function:



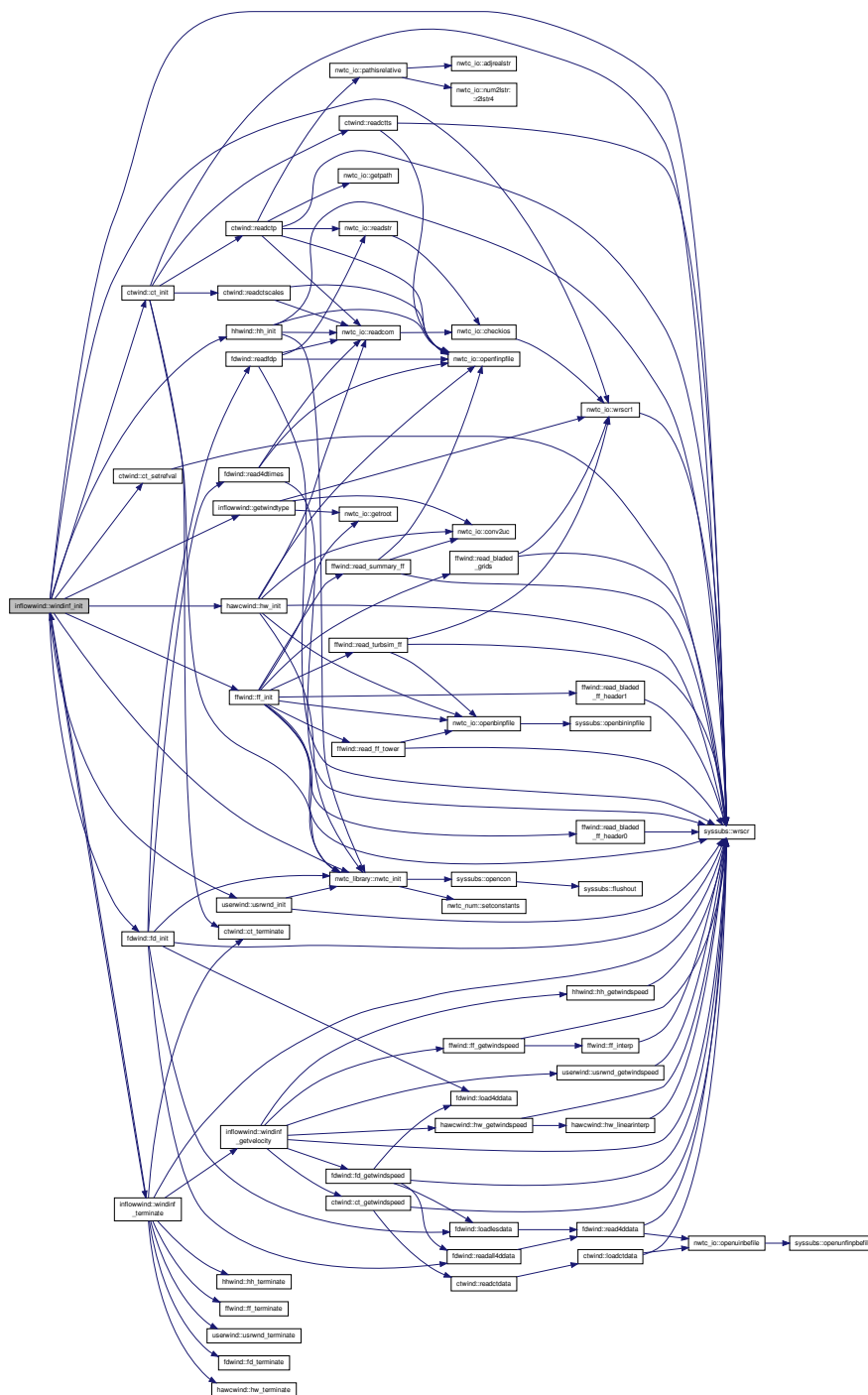
Here is the caller graph for this function:



3.20.2.13 subroutine, public inflowwind::windinf\_init ( type(inflinitinfo), intent(in) *FileInfo*, integer, intent(out) *ErrStat* )

Definition at line 26948 of file `tempassembled.f90`.

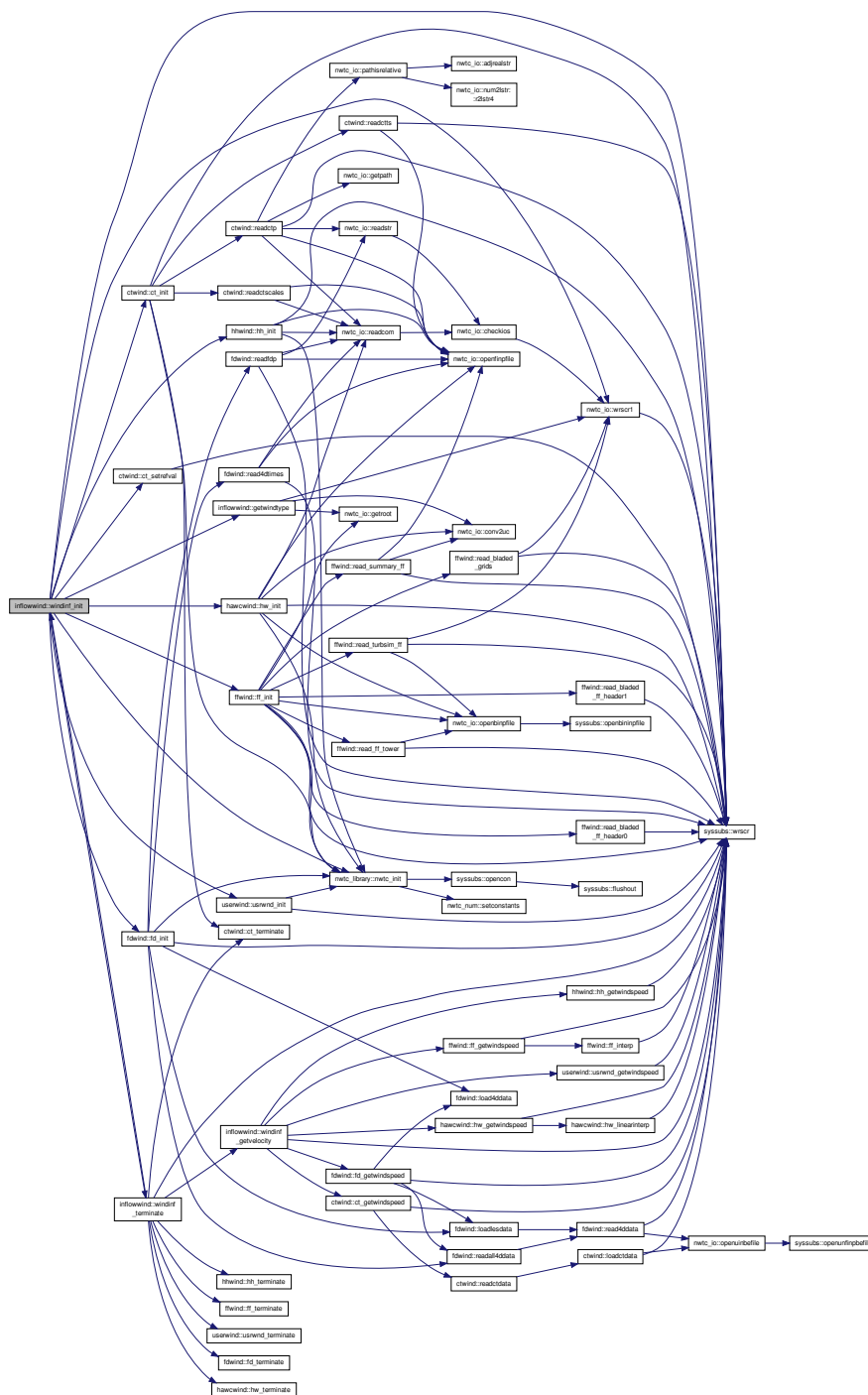
Here is the call graph for this function:



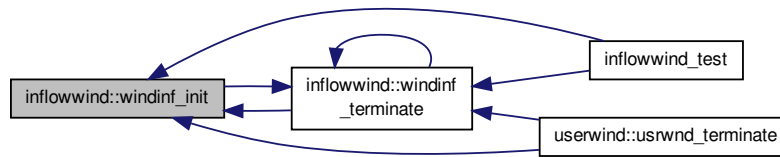
### 3.20.2.14 subroutine, public inflowwind::windinf\_init ( type(inflinitinfo), intent(in) *FileInfo*, integer, intent(out) *ErrStat* )

Definition at line 13078 of file tempassembled.f90.

Generated on Mon Dec 10 2012 16:25:18 for Wave by Doxygen



Here is the caller graph for this function:



3.20.2.15 subroutine, public inflowwind::windinf\_init ( type(inflinitinfo), intent(in) *FileInfo*, integer, intent(out) *ErrStat* )

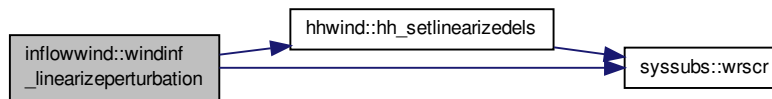
Definition at line 40818 of file tempassembled.f90.



[illegible]

Definition at line 27258 of file tempassembled.f90.

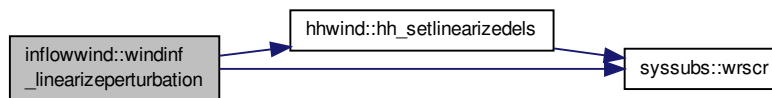
Here is the call graph for this function:



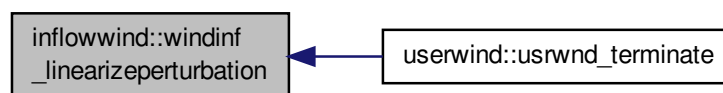
3.20.2.17 subroutine, public `inflowwind::windinf_linearizeperturbation ( real(reki), dimension(7), intent(in) LinPerturbations, integer, intent(out) ErrStat )`

Definition at line 13388 of file `tempassembled.f90`.

Here is the call graph for this function:



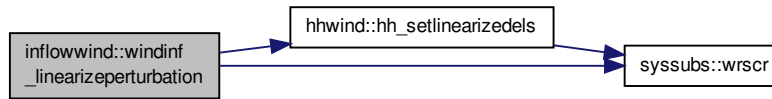
Here is the caller graph for this function:



3.20.2.18 subroutine, public `inflowwind::windinf_linearizeperturbation ( real(reki), dimension(7), intent(in) LinPerturbations, integer, intent(out) ErrStat )`

Definition at line 41128 of file `tempassembled.f90`.

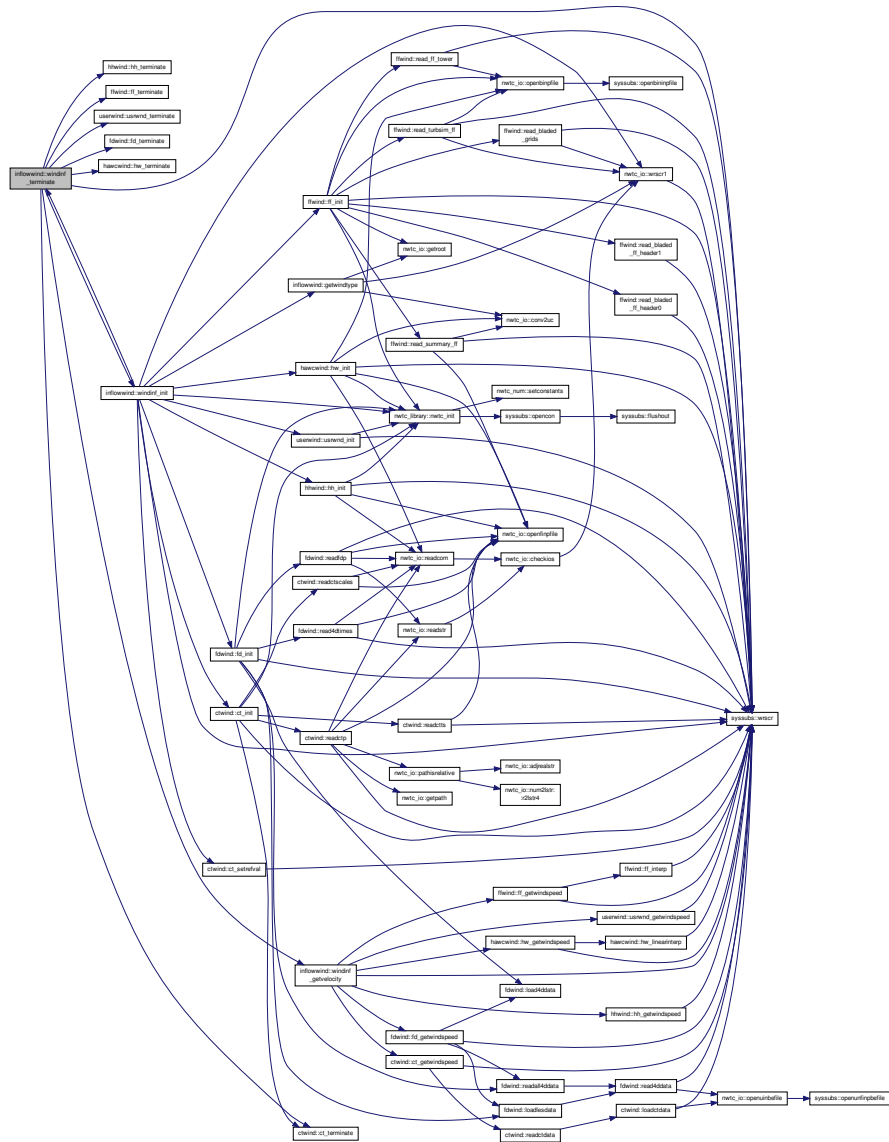
Here is the call graph for this function:



3.20.2.19 subroutine, public inflowwind::windinf\_terminate ( integer, intent(out) *ErrStat* )

Definition at line 41323 of file tempassembled.f90.

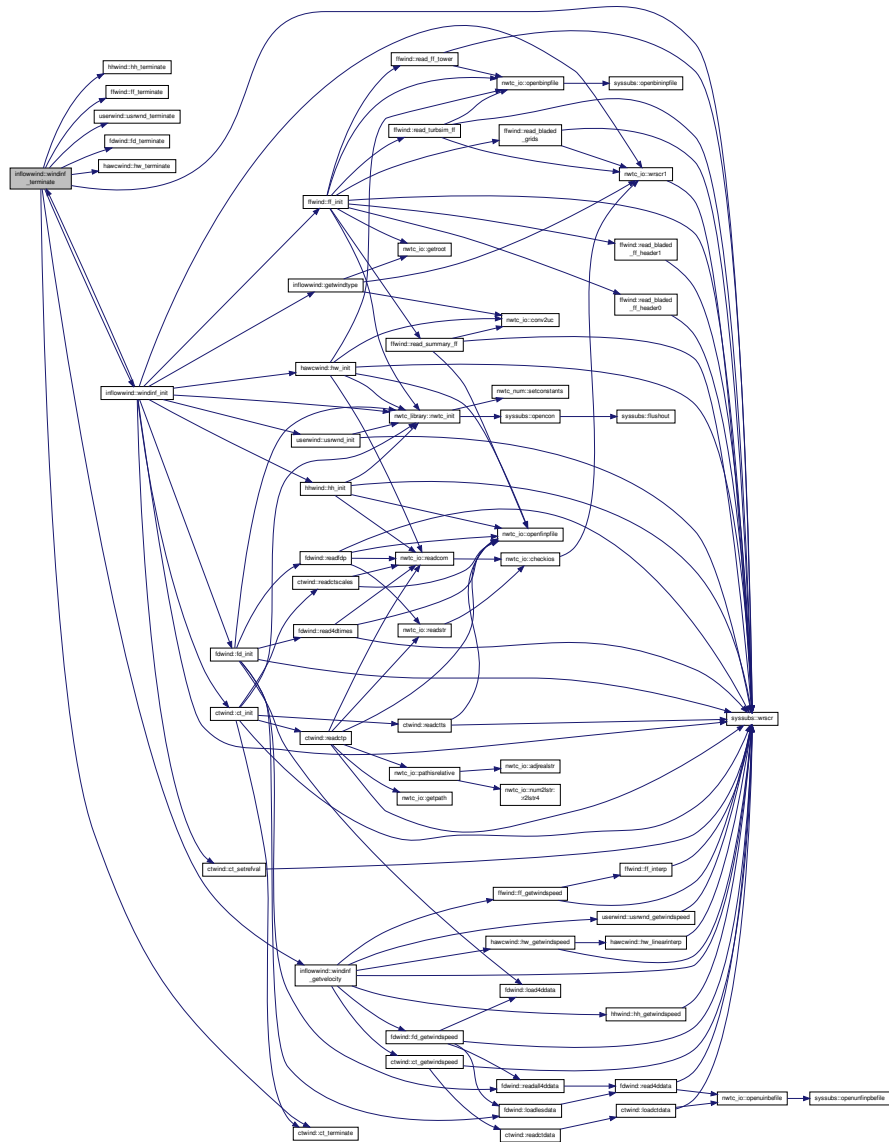
Here is the call graph for this function:



### 3.20.2.20 subroutine, public inflowwind::windinf\_terminate ( integer, intent(out) ErrStat )

Definition at line 27453 of file tempassembled.f90.

Here is the call graph for this function:



### 3.20.2.21 subroutine, public inflowwind::windinf\_terminate ( integer, intent(out) ErrStat )

Definition at line 13583 of file tempassembled.f90.

[illegible]

```

graph LR
    subgraph inflowwind
        direction TB
        terminate[inflowwind::windinf_terminate]
        init[inflowwind::windinf_init]
        windinf[inflowwind::windinf]
        terminate --> init
        init --> windinf
        windinf --> terminate
    end
    inflowwind_test[inflowwind_test] --> init
    inflowwind_test --> windinf
    userwind_usrwnd_terminate[userwind::usrwnd_terminate] --> init
    userwind_usrwnd_terminate --> windinf

```

## 3.20.3 Member Data Documentation

## 3.20.3.1 logical save inflowwind::ct\_flag = .FALSE. [private]

Definition at line 13049 of file tempassembled.f90.

## 3.20.3.2 integer inflowwind::unwind = 91 [private]

Definition at line 13047 of file tempassembled.f90.

## 3.20.3.3 character(99), parameter inflowwind::windinfver = 'InflowWind (v1.01.00b-bjj, 10-Aug-2012)'

Definition at line 13074 of file tempassembled.f90.

## 3.20.3.4 integer save inflowwind::windtype = Undef\_Wind [private]

Definition at line 13045 of file tempassembled.f90.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

## 3.21 nwtc\_num::interpbin Interface Reference

## Public Member Functions

- complex(reki) function [interpbincomp](#) (XVal, XAry, YAry, ILo, AryLen)
- real(reki) function [interpbinreal](#) (XVal, XAry, YAry, ILo, AryLen)
- complex(reki) function [interpbincomp](#) (XVal, XAry, YAry, ILo, AryLen)
- real(reki) function [interpbinreal](#) (XVal, XAry, YAry, ILo, AryLen)
- complex(reki) function [interpbincomp](#) (XVal, XAry, YAry, ILo, AryLen)
- real(reki) function [interpbinreal](#) (XVal, XAry, YAry, ILo, AryLen)

## 3.21.1 Detailed Description

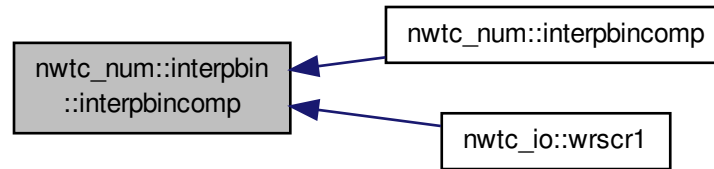
Definition at line 4507 of file tempassembled.f90.

## 3.21.2 Member Function/Subroutine Documentation

## 3.21.2.1 complex(reki) function nwtc\_num::interpbin::interpbincomp ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, complex(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) ILo, integer, intent(in) AryLen )

Definition at line 5046 of file tempassembled.f90.

Here is the caller graph for this function:



3.21.2.2 `complex(reki)` function `nwtc_num::interpbin::interpbincomp` ( `real(reki)`, `intent(in) XVal`, `real(reki)`, `dimension (arylen)`, `intent(in) XAry`, `complex(reki)`, `dimension (arylen)`, `intent(in) YAry`, `integer`, `intent(inout) ILo`, `integer`, `intent(in) AryLen` )

Definition at line 32786 of file `tempassembled.f90`.

3.21.2.3 `complex(reki)` function `nwtc_num::interpbin::interpbincomp` ( `real(reki)`, `intent(in) XVal`, `real(reki)`, `dimension (arylen)`, `intent(in) XAry`, `complex(reki)`, `dimension (arylen)`, `intent(in) YAry`, `integer`, `intent(inout) ILo`, `integer`, `intent(in) AryLen` )

Definition at line 18916 of file `tempassembled.f90`.

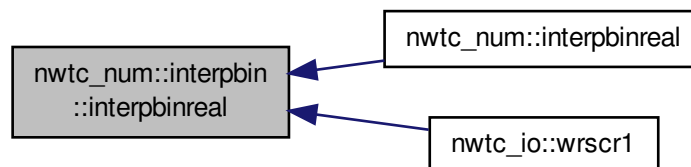
3.21.2.4 `real(reki)` function `nwtc_num::interpbin::interpbinreal` ( `real(reki)`, `intent(in) XVal`, `real(reki)`, `dimension (arylen)`, `intent(in) XAry`, `real(reki)`, `dimension (arylen)`, `intent(in) YAry`, `integer`, `intent(inout) ILo`, `integer`, `intent(in) AryLen` )

Definition at line 18985 of file `tempassembled.f90`.

3.21.2.5 `real(reki)` function `nwtc_num::interpbin::interpbinreal` ( `real(reki)`, `intent(in) XVal`, `real(reki)`, `dimension (arylen)`, `intent(in) XAry`, `real(reki)`, `dimension (arylen)`, `intent(in) YAry`, `integer`, `intent(inout) ILo`, `integer`, `intent(in) AryLen` )

Definition at line 5115 of file `tempassembled.f90`.

Here is the caller graph for this function:





3.21.2.6 `real(reki) function nwtc_num::interpbin::interpbinreal ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, real(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) ILo, integer, intent(in) AryLen )`

Definition at line 32855 of file tempassembled.f90.

The documentation for this interface was generated from the following file:

- [tempassembled.f90](#)

## 3.22 nwtc\_num::interpstp Interface Reference

### Public Member Functions

- `complex(reki) function interpstpcomp (XVal, XAry, YAry, Ind, AryLen)`
- `real(reki) function interpstpreal (XVal, XAry, YAry, Ind, AryLen)`
- `complex(reki) function interpstpcomp (XVal, XAry, YAry, Ind, AryLen)`
- `real(reki) function interpstpreal (XVal, XAry, YAry, Ind, AryLen)`
- `complex(reki) function interpstpcomp (XVal, XAry, YAry, Ind, AryLen)`
- `real(reki) function interpstpreal (XVal, XAry, YAry, Ind, AryLen)`

### 3.22.1 Detailed Description

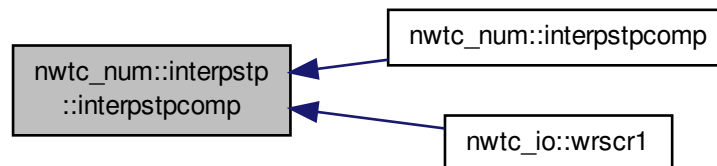
Definition at line 4515 of file tempassembled.f90.

### 3.22.2 Member Function/Subroutine Documentation

3.22.2.1 `complex(reki) function nwtc_num::interpstp::interpstpcomp ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, complex(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) Ind, integer, intent(in) AryLen )`

Definition at line 5183 of file tempassembled.f90.

Here is the caller graph for this function:



3.22.2.2 `complex(reki) function nwtc_num::interpstp::interpstpcomp ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, complex(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) Ind, integer, intent(in) AryLen )`

Definition at line 32923 of file tempassembled.f90.

3.22.2.3 `complex(reki) function nwtc_num::interpstp::interpstpcomp ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, complex(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) Ind, integer, intent(in) AryLen )`

Definition at line 19053 of file `tempassembled.f90`.

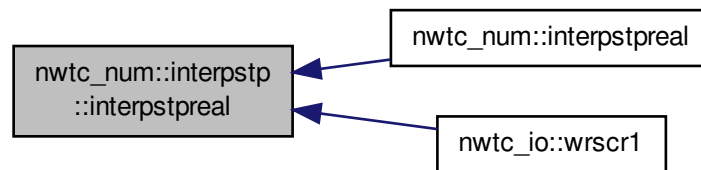
3.22.2.4 `real(reki) function nwtc_num::interpstp::interpstpreal ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, real(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) Ind, integer, intent(in) AryLen )`

Definition at line 19123 of file `tempassembled.f90`.

3.22.2.5 `real(reki) function nwtc_num::interpstp::interpstpreal ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, real(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) Ind, integer, intent(in) AryLen )`

Definition at line 5253 of file `tempassembled.f90`.

Here is the caller graph for this function:



3.22.2.6 `real(reki) function nwtc_num::interpstp::interpstpreal ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, real(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) Ind, integer, intent(in) AryLen )`

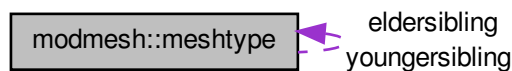
Definition at line 32993 of file `tempassembled.f90`.

The documentation for this interface was generated from the following file:

- [tempassembled.f90](#)

### 3.23 modmesh::meshtype Type Reference

Collaboration diagram for `modmesh::meshtype`:



## Public Attributes

- logical [committed](#)
- integer(intki) [ios](#)
- integer(intki) [remapflag](#)
- integer(intki) [nnodes](#)
- integer(intki) [nelements](#)
- integer(intki) [npoint](#)
- integer(intki) [nline2](#)
- integer(intki) [nline3](#)
- integer(intki) [ntri3](#)
- integer(intki) [ntri6](#)
- integer(intki) [nquad4](#)
- integer(intki) [nquad8](#)
- integer(intki) [ntet4](#)
- integer(intki) [ntet10](#)
- integer(intki) [nhex8](#)
- integer(intki) [nhex20](#)
- integer(intki) [nwedge6](#)
- integer(intki) [nwedge15](#)
- integer(intki), dimension(:),  
pointer [element\\_point](#)
- integer(intki), dimension(:, :),  
pointer [element\\_line2](#)
- integer(intki), dimension(:, :),  
pointer [element\\_line3](#)
- integer(intki), dimension(:, :),  
pointer [element\\_tri3](#)
- integer(intki), dimension(:, :),  
pointer [element\\_tri6](#)
- integer(intki), dimension(:, :),  
pointer [element\\_quad4](#)
- integer(intki), dimension(:, :),  
pointer [element\\_quad8](#)
- integer(intki), dimension(:, :),  
pointer [element\\_tet4](#)
- integer(intki), dimension(:, :),  
pointer [element\\_tet10](#)
- integer(intki), dimension(:, :),  
pointer [element\\_hex8](#)
- integer(intki), dimension(:, :),  
pointer [element\\_hex20](#)
- integer(intki), dimension(:, :),  
pointer [element\\_wedge6](#)
- integer(intki), dimension(:, :),  
pointer [element\\_wedge15](#)
- real(reki), dimension(:, :), pointer [position](#)
- real(reki), dimension(:, :), pointer [force](#)
- real(reki), dimension(:, :), pointer [moment](#)
- real(reki), dimension(:, :, :),  
pointer [orientation](#)
- real(reki), dimension(:, :), pointer [rotation](#)

- real(reki), dimension(:,,:), pointer [translation](#)
- real(reki), dimension(:,,:), pointer [addedmass](#)
- real(reki), dimension(:,,:), pointer [scalars](#)
- type([meshtype](#)), pointer [youngersibling](#)
- type([meshtype](#)), pointer [eldersibling](#)

### 3.23.1 Detailed Description

Definition at line 5904 of file tempassembled.f90.

### 3.23.2 Member Data Documentation

#### 3.23.2.1 real(reki), dimension(:,,:), pointer modmesh::meshtype::addedmass

Definition at line 5943 of file tempassembled.f90.

#### 3.23.2.2 logical modmesh::meshtype::committed

Definition at line 5905 of file tempassembled.f90.

#### 3.23.2.3 type(meshtype), pointer modmesh::meshtype::eldersibling

Definition at line 5946 of file tempassembled.f90.

#### 3.23.2.4 integer(intki), dimension(:,,:), pointer modmesh::meshtype::element\_hex20

Definition at line 5934 of file tempassembled.f90.

#### 3.23.2.5 integer(intki), dimension(:,,:), pointer modmesh::meshtype::element\_hex8

Definition at line 5933 of file tempassembled.f90.

#### 3.23.2.6 integer(intki), dimension(:,,:), pointer modmesh::meshtype::element\_line2

Definition at line 5925 of file tempassembled.f90.

#### 3.23.2.7 integer(intki), dimension(:,,:), pointer modmesh::meshtype::element\_line3

Definition at line 5926 of file tempassembled.f90.

#### 3.23.2.8 integer(intki), dimension(:), pointer modmesh::meshtype::element\_point

Definition at line 5924 of file tempassembled.f90.

#### 3.23.2.9 integer(intki), dimension(:,,:), pointer modmesh::meshtype::element\_quad4

Definition at line 5929 of file tempassembled.f90.

#### 3.23.2.10 integer(intki), dimension(:,,:), pointer modmesh::meshtype::element\_quad8

Definition at line 5930 of file tempassembled.f90.

3.23.2.11 `integer(intki), dimension(:, :), pointer modmesh::meshtype::element_tet10`

Definition at line 5932 of file tempassembled.f90.

3.23.2.12 `integer(intki), dimension(:, :), pointer modmesh::meshtype::element_tet4`

Definition at line 5931 of file tempassembled.f90.

3.23.2.13 `integer(intki), dimension(:, :), pointer modmesh::meshtype::element_tri3`

Definition at line 5927 of file tempassembled.f90.

3.23.2.14 `integer(intki), dimension(:, :), pointer modmesh::meshtype::element_tri6`

Definition at line 5928 of file tempassembled.f90.

3.23.2.15 `integer(intki), dimension(:, :), pointer modmesh::meshtype::element_wedge15`

Definition at line 5936 of file tempassembled.f90.

3.23.2.16 `integer(intki), dimension(:, :), pointer modmesh::meshtype::element_wedge6`

Definition at line 5935 of file tempassembled.f90.

3.23.2.17 `real(reki), dimension(:, :), pointer modmesh::meshtype::force`

Definition at line 5938 of file tempassembled.f90.

3.23.2.18 `integer(intki) modmesh::meshtype::ios`

Definition at line 5906 of file tempassembled.f90.

3.23.2.19 `real(reki), dimension(:, :), pointer modmesh::meshtype::moment`

Definition at line 5939 of file tempassembled.f90.

3.23.2.20 `integer(intki) modmesh::meshtype::nelements`

Definition at line 5910 of file tempassembled.f90.

3.23.2.21 `integer(intki) modmesh::meshtype::nhex20`

Definition at line 5921 of file tempassembled.f90.

3.23.2.22 `integer(intki) modmesh::meshtype::nhex8`

Definition at line 5920 of file tempassembled.f90.

3.23.2.23 `integer(intki) modmesh::meshtype::nline2`

Definition at line 5912 of file tempassembled.f90.

3.23.2.24 `integer(intki) modmesh::meshtype::nline3`

Definition at line 5913 of file tempassembled.f90.

**3.23.2.25 integer(intki) modmesh::meshtype::nnodes**

Definition at line 5909 of file tempassembled.f90.

**3.23.2.26 integer(intki) modmesh::meshtype::npoint**

Definition at line 5911 of file tempassembled.f90.

**3.23.2.27 integer(intki) modmesh::meshtype::nquad4**

Definition at line 5916 of file tempassembled.f90.

**3.23.2.28 integer(intki) modmesh::meshtype::nquad8**

Definition at line 5917 of file tempassembled.f90.

**3.23.2.29 integer(intki) modmesh::meshtype::ntet10**

Definition at line 5919 of file tempassembled.f90.

**3.23.2.30 integer(intki) modmesh::meshtype::ntet4**

Definition at line 5918 of file tempassembled.f90.

**3.23.2.31 integer(intki) modmesh::meshtype::ntri3**

Definition at line 5914 of file tempassembled.f90.

**3.23.2.32 integer(intki) modmesh::meshtype::ntri6**

Definition at line 5915 of file tempassembled.f90.

**3.23.2.33 integer(intki) modmesh::meshtype::nwedge15**

Definition at line 5923 of file tempassembled.f90.

**3.23.2.34 integer(intki) modmesh::meshtype::nwedge6**

Definition at line 5922 of file tempassembled.f90.

**3.23.2.35 real(reki), dimension(:,,:), pointer modmesh::meshtype::orientation**

Definition at line 5940 of file tempassembled.f90.

**3.23.2.36 real(reki), dimension(:,,:), pointer modmesh::meshtype::position**

Definition at line 5937 of file tempassembled.f90.

**3.23.2.37 integer(intki) modmesh::meshtype::remapflag**

Definition at line 5907 of file tempassembled.f90.

**3.23.2.38 real(reki), dimension(:,,:), pointer modmesh::meshtype::rotation**

Definition at line 5941 of file tempassembled.f90.

#### 3.23.2.39 `real(reki), dimension(:,,:), pointer modmesh::meshtype::scalars`

Definition at line 5944 of file tempassembled.f90.

#### 3.23.2.40 `real(reki), dimension(:,,:), pointer modmesh::meshtype::translation`

Definition at line 5942 of file tempassembled.f90.

#### 3.23.2.41 `type(meshtype), pointer modmesh::meshtype::youngersibling`

Definition at line 5945 of file tempassembled.f90.

The documentation for this type was generated from the following file:

- [tempassembled.f90](#)

## 3.24 modmesh Module Reference

### Data Types

- type [meshtype](#)

### Public Attributes

- integer(intki), parameter [mesh\\_newcopy](#) = 1
- integer(intki), parameter [mesh\\_sibling](#) = 2
- integer(intki), parameter [mesh\\_updatecopy](#) = 3

#### 3.24.1 Detailed Description

Definition at line 5890 of file tempassembled.f90.

#### 3.24.2 Member Data Documentation

##### 3.24.2.1 `integer(intki), parameter modmesh::mesh_newcopy = 1`

Definition at line 5899 of file tempassembled.f90.

##### 3.24.2.2 `integer(intki), parameter modmesh::mesh_sibling = 2`

Definition at line 5900 of file tempassembled.f90.

##### 3.24.2.3 `integer(intki), parameter modmesh::mesh_updatecopy = 3`

Definition at line 5901 of file tempassembled.f90.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

## 3.25 nwtc\_io::num2lstr Interface Reference

### Public Member Functions

- character(11) function [int2lstr](#) (Intgr)
- [r2lstr4](#)
- character(15) function [r2lstr8](#) (FltNum)
- character(15) function [r2lstr16](#) (FltNum)
- character(11) function [int2lstr](#) (Intgr)
- [r2lstr4](#)
- character(15) function [r2lstr8](#) (FltNum)
- character(15) function [r2lstr16](#) (FltNum)
- character(11) function [int2lstr](#) (Intgr)
- [r2lstr4](#)
- character(15) function [r2lstr8](#) (FltNum)
- character(15) function [r2lstr16](#) (FltNum)

### 3.25.1 Detailed Description

Definition at line 1097 of file tempassembled.f90.

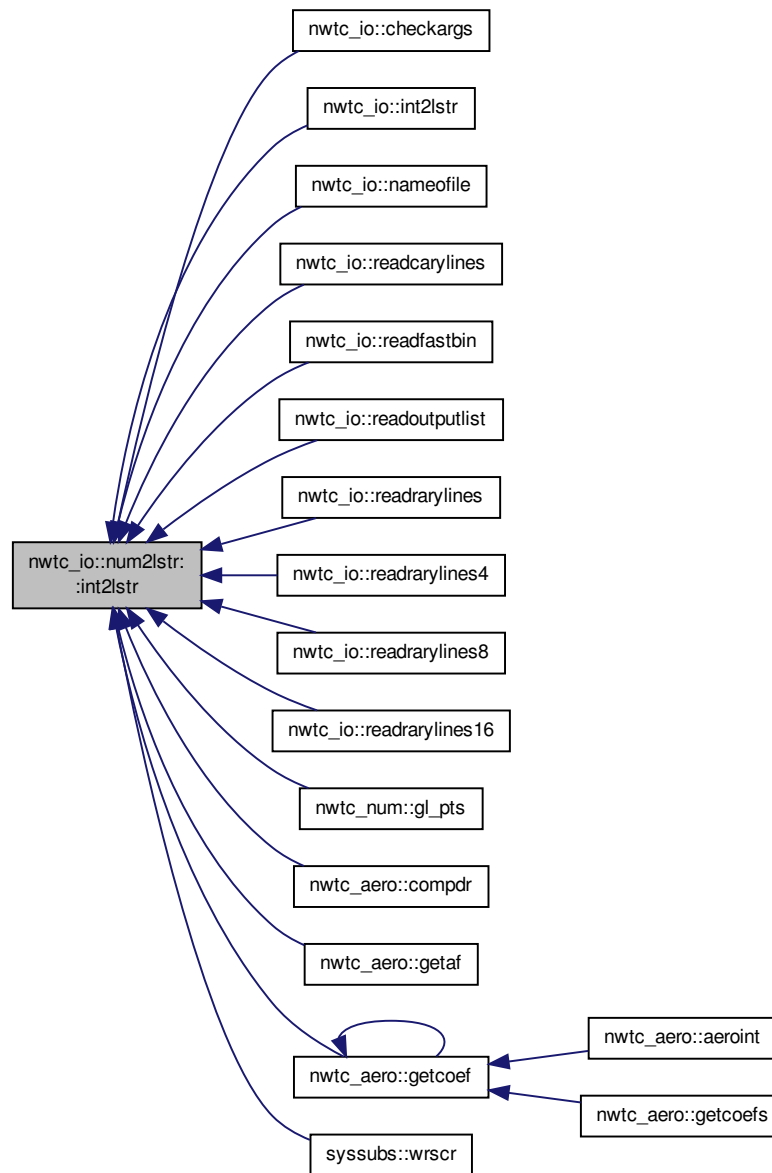
### 3.25.2 Member Function/Subroutine Documentation

#### 3.25.2.1 character(11) function nwtc\_io::num2lstr::int2lstr ( integer, intent(in) *Intgr* )

Definition at line 2296 of file tempassembled.f90.



Here is the caller graph for this function:



### 3.25.2.2 character(11) function nwtc\_io::num2lstr::int2lstr ( integer, intent(in) *Intgr* )

Definition at line 16166 of file `tempassembled.f90`.

### 3.25.2.3 character(11) function nwtc\_io::num2lstr::int2lstr ( integer, intent(in) *Intgr* )

Definition at line 30036 of file `tempassembled.f90`.

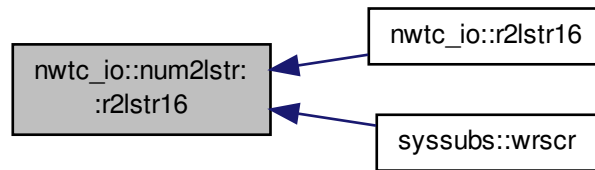
3.25.2.4 character(15) function nwtc\_io::num2lstr::r2lstr16 ( real(quki), intent(in) *FltNum* )

Definition at line 16833 of file tempassembled.f90.

3.25.2.5 character(15) function nwtc\_io::num2lstr::r2lstr16 ( real(quki), intent(in) *FltNum* )

Definition at line 2963 of file tempassembled.f90.

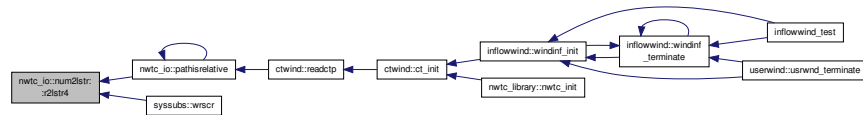
Here is the caller graph for this function:

3.25.2.6 character(15) function nwtc\_io::num2lstr::r2lstr16 ( real(quki), intent(in) *FltNum* )

Definition at line 30703 of file tempassembled.f90.

## 3.25.2.7 nwtc\_io::num2lstr::r2lstr4 ( )

Here is the caller graph for this function:



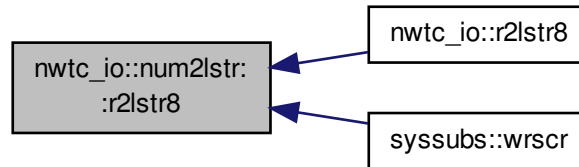
## 3.25.2.8 nwtc\_io::num2lstr::r2lstr4 ( )

## 3.25.2.9 nwtc\_io::num2lstr::r2lstr4 ( )

3.25.2.10 character(15) function nwtc\_io::num2lstr::r2lstr8 ( real(r8ki), intent(in) *FltNum* )

Definition at line 2928 of file tempassembled.f90.

Here is the caller graph for this function:



3.25.2.11 character(15) function nwtc\_io::num2lstr::r2lstr8 ( real(r8ki), intent(in) *FltNum* )

Definition at line 16798 of file tempassembled.f90.

3.25.2.12 character(15) function nwtc\_io::num2lstr::r2lstr8 ( real(r8ki), intent(in) *FltNum* )

Definition at line 30668 of file tempassembled.f90.

The documentation for this interface was generated from the following files:

- [tempassembled.f90](#)

## 3.26 nwtc\_aero Module Reference

### Data Types

- type [aerodata](#)
- type [aerotable](#)
- type [alfindx](#)
- type [elmtable](#)

### Public Member Functions

- subroutine [aeroint](#) (ISeg, Alpha, Re, AF\_Table, IntData, DoCl, DoCd, DoCm, DoCpmin, ErrStat)
- subroutine [compdr](#) (NumSeg, RLoc, HubRad, RotorRad, DimenInp, DelRLoc, ErrStat)
- subroutine [getaf](#) (AF\_File, AF\_Table, ISeg)
- real(reki) function [getcoef](#) (ISeg, Alpha, AlfaTab, CoefTab, NumRows, Ind, ErrStat)
- subroutine [getcoefs](#) (ISeg, Alpha, Re, AF\_Table, ClInt, CdInt, Cmlnt, CpminInt, DoCl, DoCd, DoCm, DoCpmin, ErrStat)
- subroutine [aeroint](#) (ISeg, Alpha, Re, AF\_Table, IntData, DoCl, DoCd, DoCm, DoCpmin, ErrStat)
- subroutine [compdr](#) (NumSeg, RLoc, HubRad, RotorRad, DimenInp, DelRLoc, ErrStat)
- subroutine [getaf](#) (AF\_File, AF\_Table, ISeg)
- real(reki) function [getcoef](#) (ISeg, Alpha, AlfaTab, CoefTab, NumRows, Ind, ErrStat)
- subroutine [getcoefs](#) (ISeg, Alpha, Re, AF\_Table, ClInt, CdInt, Cmlnt, CpminInt, DoCl, DoCd, DoCm, DoCpmin, ErrStat)
- subroutine [aeroint](#) (ISeg, Alpha, Re, AF\_Table, IntData, DoCl, DoCd, DoCm, DoCpmin, ErrStat)

- subroutine `compdr` (NumSeg, RLoc, HubRad, RotorRad, DimenInp, DelRLoc, ErrStat)
- subroutine `getaf` (AF\_File, AF\_Table, ISeg)
- real(reki) function `getcoef` (ISeg, Alpha, AlfaTab, CoefTab, NumRows, Ind, ErrStat)
- subroutine `getcoefs` (ISeg, Alpha, Re, AF\_Table, Cllnt, CdInt, Cmlnt, CpminInt, DoCl, DoCd, DoCm, DoCpmin, ErrStat)

#### Public Attributes

- logical `usecm` = .FALSE.
- logical `usecpmin` = .FALSE.

#### 3.26.1 Detailed Description

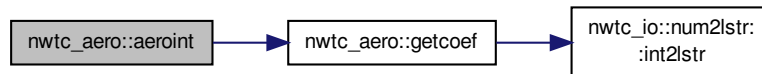
Definition at line 5951 of file `tempassembled.f90`.

#### 3.26.2 Member Function/Subroutine Documentation

3.26.2.1 subroutine `nwtc_aero::aeroint` ( integer, intent(in) *ISeg*, real(reki), intent(in) *Alpha*, real(reki), intent(in) *Re*, type(*elmtable*), intent(inout) *AF\_Table*, type(*aerodata*), intent(out) *IntData*, logical, intent(in) *DoCl*, logical, intent(in) *DoCd*, logical, intent(in) *DoCm*, logical, intent(in) *DoCpmin*, integer, intent(out), optional *ErrStat* )

Definition at line 6032 of file `tempassembled.f90`.

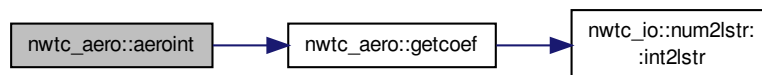
Here is the call graph for this function:



3.26.2.2 subroutine `nwtc_aero::aeroint` ( integer, intent(in) *ISeg*, real(reki), intent(in) *Alpha*, real(reki), intent(in) *Re*, type(*elmtable*), intent(inout) *AF\_Table*, type(*aerodata*), intent(out) *IntData*, logical, intent(in) *DoCl*, logical, intent(in) *DoCd*, logical, intent(in) *DoCm*, logical, intent(in) *DoCpmin*, integer, intent(out), optional *ErrStat* )

Definition at line 33772 of file `tempassembled.f90`.

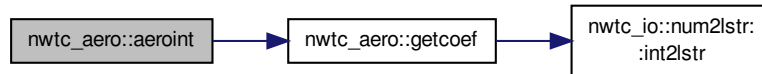
Here is the call graph for this function:



3.26.2.3 subroutine `nwtc_aero::aeroint` ( integer, intent(in) *ISeg*, real(reki), intent(in) *Alpha*, real(reki), intent(in) *Re*, type(`elmtable`), intent(inout) *AF\_Table*, type(`aerodata`), intent(out) *IntData*, logical, intent(in) *DoCl*, logical, intent(in) *DoCd*, logical, intent(in) *DoCm*, logical, intent(in) *DoCpmin*, integer, intent(out), optional *ErrStat* )

Definition at line 19902 of file `tempassembled.f90`.

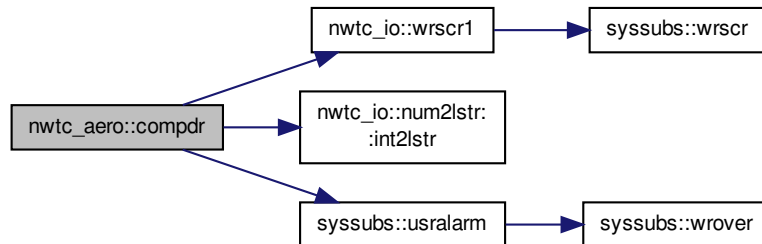
Here is the call graph for this function:



3.26.2.4 subroutine `nwtc_aero::compdr` ( integer, intent(in) *NumSeg*, real(reki), dimension (numseg), intent(in) *RLoc*, real(reki), intent(in) *HubRad*, real(reki), intent(in) *RotorRad*, logical, intent(in) *DimenInp*, real(reki), dimension (numseg), intent(out) *DelRLoc*, integer, intent(out), optional *ErrStat* )

Definition at line 6221 of file `tempassembled.f90`.

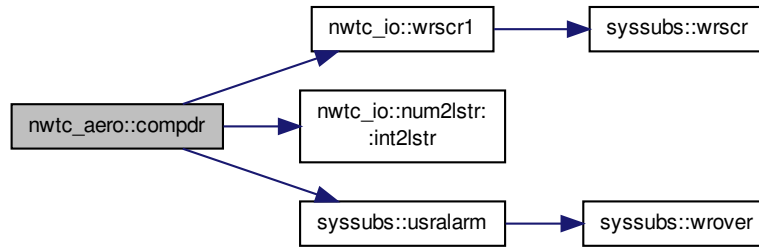
Here is the call graph for this function:



3.26.2.5 subroutine `nwtc_aero::compdr` ( integer, intent(in) *NumSeg*, real(reki), dimension (numseg), intent(in) *RLoc*, real(reki), intent(in) *HubRad*, real(reki), intent(in) *RotorRad*, logical, intent(in) *DimenInp*, real(reki), dimension (numseg), intent(out) *DelRLoc*, integer, intent(out), optional *ErrStat* )

Definition at line 33961 of file `tempassembled.f90`.

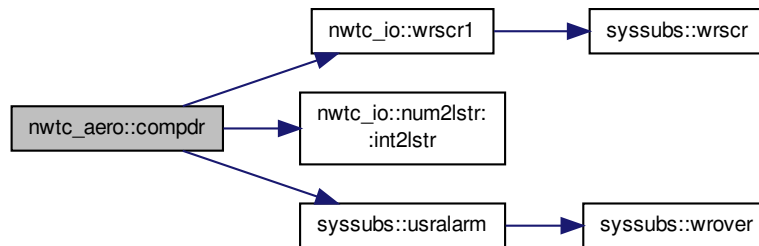
Here is the call graph for this function:



3.26.2.6 subroutine `nwtc_aero::compdr` ( integer, intent(in) *NumSeg*, real(*reki*), dimension (numseg), intent(in) *RLoc*, real(*reki*), intent(in) *HubRad*, real(*reki*), intent(in) *RotorRad*, logical, intent(in) *DimenInp*, real(*reki*), dimension (numseg), intent(out) *DelRLoc*, integer, intent(out), optional *ErrStat* )

Definition at line 20091 of file `tempassembled.f90`.

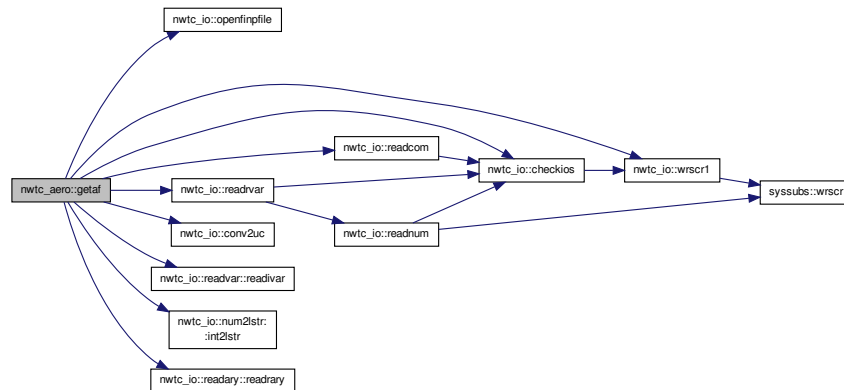
Here is the call graph for this function:



3.26.2.7 subroutine `nwtc_aero::getaf` ( character(\*), intent(in) *AF\_File*, type (elmtable), intent(out) *AF\_Table*, integer, intent(in) *ISeg* )

Definition at line 34060 of file `tempassembled.f90`.

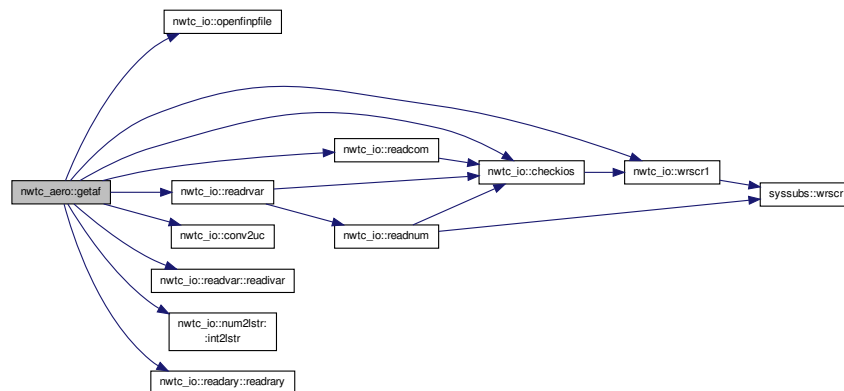
Here is the call graph for this function:



**3.26.2.8** subroutine `nwtc_aero::getaf` ( `character(*)`, `intent(in) AF_File`, `type(elmtable)`, `intent(out) AF_Table`, `integer`, `intent(in) ISeg` )

Definition at line 20190 of file `tempassembled.f90`.

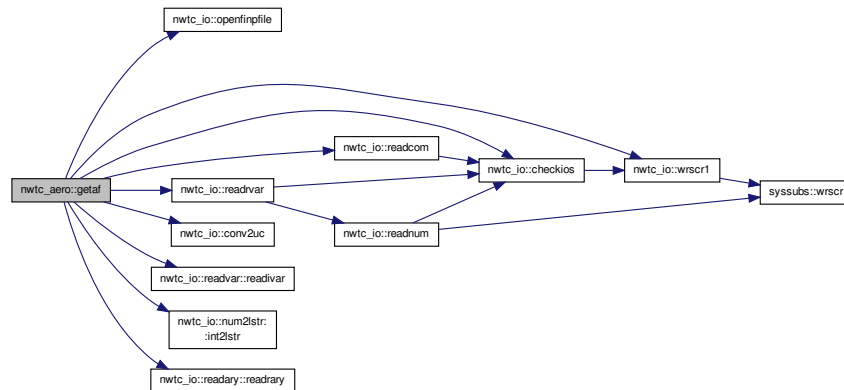
Here is the call graph for this function:



**3.26.2.9** subroutine `nwtc_aero::getaf` ( `character(*)`, `intent(in) AF_File`, `type(elmtable)`, `intent(out) AF_Table`, `integer`, `intent(in) ISeg` )

Definition at line 6320 of file `tempassembled.f90`.

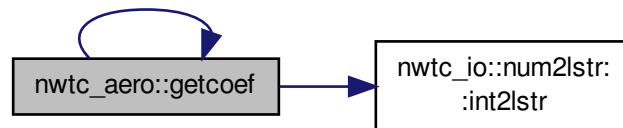
Here is the call graph for this function:



**3.26.2.10** `real(reki) function nwtc_aero::getcoef ( integer, intent(in) ISeg, real(reki), intent(in) Alpha, real(reki), dimension (numrows), intent(in) AlfaTab, real(reki), dimension (numrows), intent(in) CoefTab, integer, intent(in) NumRows, integer, intent(inout) Ind, integer, intent(out), optional ErrStat )`

Definition at line 20730 of file `tempassembled.f90`.

Here is the call graph for this function:

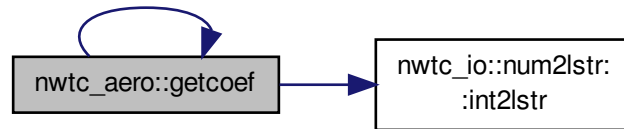


**3.26.2.11** `real(reki) function nwtc_aero::getcoef ( integer, intent(in) ISeg, real(reki), intent(in) Alpha, real(reki), dimension (numrows), intent(in) AlfaTab, real(reki), dimension (numrows), intent(in) CoefTab, integer, intent(in) NumRows, integer, intent(inout) Ind, integer, intent(out), optional ErrStat )`

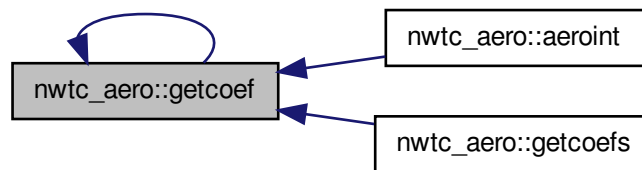
Definition at line 6860 of file `tempassembled.f90`.



Here is the call graph for this function:



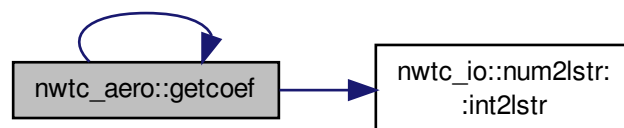
Here is the caller graph for this function:



3.26.2.12 `real(reki) function nwtc_aero::getcoef ( integer, intent(in) ISeg, real(reki), intent(in) Alpha, real(reki), dimension (numrows), intent(in) AlfaTab, real(reki), dimension (numrows), intent(in) CoefTab, integer, intent(in) NumRows, integer, intent(inout) Ind, integer, intent(out), optional ErrStat )`

Definition at line 34600 of file `tempassembled.f90`.

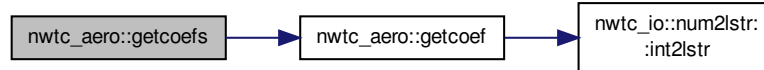
Here is the call graph for this function:



3.26.2.13 subroutine nwtc\_aero::getcoefs ( integer, intent(in) *ISeg*, real(reki), intent(in) *Alpha*, real(reki), intent(in) *Re*, type (elmtable), intent(inout) *AF\_Table*, real(reki), intent(out) *ClInt*, real(reki), intent(out) *CdInt*, real(reki), intent(out) *CmInt*, real(reki), intent(out) *CpminInt*, logical, intent(in) *DoCl*, logical, intent(in) *DoCd*, logical, intent(in) *DoCm*, logical, intent(in) *DoCpmin*, integer, intent(out), optional *ErrStat* )

Definition at line 20781 of file tempassembled.f90.

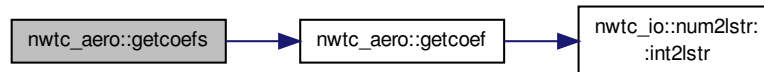
Here is the call graph for this function:



3.26.2.14 subroutine nwtc\_aero::getcoefs ( integer, intent(in) *ISeg*, real(reki), intent(in) *Alpha*, real(reki), intent(in) *Re*, type (elmtable), intent(inout) *AF\_Table*, real(reki), intent(out) *ClInt*, real(reki), intent(out) *CdInt*, real(reki), intent(out) *CmInt*, real(reki), intent(out) *CpminInt*, logical, intent(in) *DoCl*, logical, intent(in) *DoCd*, logical, intent(in) *DoCm*, logical, intent(in) *DoCpmin*, integer, intent(out), optional *ErrStat* )

Definition at line 34651 of file tempassembled.f90.

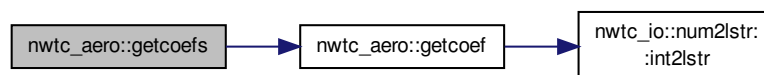
Here is the call graph for this function:



3.26.2.15 subroutine nwtc\_aero::getcoefs ( integer, intent(in) *ISeg*, real(reki), intent(in) *Alpha*, real(reki), intent(in) *Re*, type (elmtable), intent(inout) *AF\_Table*, real(reki), intent(out) *ClInt*, real(reki), intent(out) *CdInt*, real(reki), intent(out) *CmInt*, real(reki), intent(out) *CpminInt*, logical, intent(in) *DoCl*, logical, intent(in) *DoCd*, logical, intent(in) *DoCm*, logical, intent(in) *DoCpmin*, integer, intent(out), optional *ErrStat* )

Definition at line 6911 of file tempassembled.f90.

Here is the call graph for this function:



## 3.26.3 Member Data Documentation

## 3.26.3.1 logical nwtc\_aero::usecm = .FALSE.

Definition at line 6025 of file tempassembled.f90.

## 3.26.3.2 logical nwtc\_aero::usecpmin = .FALSE.

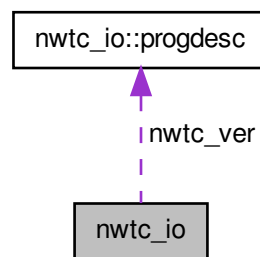
Definition at line 6026 of file tempassembled.f90.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

## 3.27 nwtc\_io Module Reference

Collaboration diagram for nwtc\_io:



## Data Types

- interface [allocary](#)
- interface [dispnvd](#)
- type [fastdatatype](#)
- interface [num2lstr](#)
- type [progdesc](#)
- interface [readary](#)
- interface [readarylines](#)
- interface [readvar](#)

## Public Member Functions

- subroutine [adjrealstr](#) (NumStr)
- subroutine [allcary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allcary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allcary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)

- subroutine [alliary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [alliary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [alliary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [alllary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [alllary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [alllary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [allrary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allrary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allrary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [allrary4](#) (Ary, AryDim1, AryDim2, AryDim3, AryDim4, Descr, ErrStat)
- subroutine [checkios](#) (IOS, Fil, Variable, VarType, TrapErrors)
- subroutine [checkargs](#) (InputFile, ErrStat)
- subroutine [closeecho](#) ()
- subroutine [conv2uc](#) (Str)
- integer function [countwords](#) (Line)
- character(11) function [curdate](#) ()
- character(8) function [curtime](#) ()
- subroutine [dispnvd0](#)
- subroutine [dispnvd1](#) (ProgInfo)
- subroutine [dispnvd2](#) (Name, Ver)
- character(15) function [flt2lstr](#) (FltNum)
- subroutine [getnewunit](#) (UnIn)
- character(200) function [getnvd](#) (ProgInfo)
- subroutine [getpath](#) (GivenFil, PathName)
- subroutine [getroot](#) (GivenFil, RootName)
- subroutine [gettokens](#) (Line, NumTok, Tokens, Error)
- subroutine [getwords](#) (Line, Words, NumWords)
- character(11) function [int2lstr](#) (Intgr)
- subroutine [nameofile](#) (InArg, OutExten, OutFile, ErrStat)
- subroutine [normstop](#)
- subroutine [openbin](#) (Un, OutFile, RecLen, ErrStat)
- subroutine [openbinpfile](#) (Un, InFile, ErrStat)
- subroutine [openecho](#) (Un, OutFile, ErrStat)
- subroutine [openfinpfile](#) (Un, InFile, ErrStat)
- subroutine [openfoutfile](#) (Un, OutFile, ErrStat)
- subroutine [openfunkfile](#) (Un, OutFile, FailAbt, Failed, Exists, ErrStat)
- subroutine [openuinfile](#) (Un, InFile, ErrStat)
- subroutine [openuinbfile](#) (Un, InFile, RecLen, ErrStat)
- subroutine [openuoutfile](#) (Un, OutFile, ErrStat)
- logical function [pathisrelative](#) (GivenFil)
- character(15) function [r2lstr8](#) (FltNum)
- character(15) function [r2lstr16](#) (FltNum)
- subroutine [readcary](#) (UnIn, Fil, CharAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readcarylines](#) (UnIn, Fil, CharAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readcom](#) (UnIn, Fil, ComName, ErrStat)
- subroutine [readcvar](#) (UnIn, Fil, CharVar, VarName, VarDescr, ErrStat)
- subroutine [readfastbin](#) (UnIn, FASTdata, ErrLev, ErrMsg)
- subroutine [readiary](#) (UnIn, Fil, IntAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readivar](#) (UnIn, Fil, IntVar, VarName, VarDescr, ErrStat)
- subroutine [readlary](#) (UnIn, Fil, LogAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readlvar](#) (UnIn, Fil, LogVar, VarName, VarDescr, ErrStat)

- subroutine [readnum](#) (UnIn, Fil, Word, VarName, ErrStat)
- subroutine [readoutputlist](#) (UnIn, Fil, CharAry, AryLenRead, AryName, AryDescr, ErrStat)
- subroutine [readrary](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrarylines](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrarylines4](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrarylines8](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrarylines16](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrvar](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr4var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr8var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr16var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readstr](#) (UnIn, Fil, CharVar, VarName, VarDescr, ErrStat)
- subroutine [waittime](#) (WaitSecs)
- subroutine [wrpr](#) (Str)
- subroutine [wrfilenr](#) (Unit, Str)
- subroutine [wrml](#) (Str)
- subroutine [wrscr1](#) (Str)
- subroutine [adjrealstr](#) (NumStr)
- subroutine [allcary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allcary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allcary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [alliary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [alliary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [alliary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [alllary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [alllary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [alllary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [allrary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allrary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allrary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [allrary4](#) (Ary, AryDim1, AryDim2, AryDim3, AryDim4, Descr, ErrStat)
- subroutine [checkios](#) (IOS, Fil, Variable, VarType, TrapErrors)
- subroutine [checkargs](#) (InputFile, ErrStat)
- subroutine [closeecho](#) ()
- subroutine [conv2uc](#) (Str)
- integer function [countwords](#) (Line)
- character(11) function [curdate](#) ()
- character(8) function [curtime](#) ()
- subroutine [dispnvd0](#)
- subroutine [dispnvd1](#) (ProgInfo)
- subroutine [dispnvd2](#) (Name, Ver)
- character(15) function [flt2lstr](#) (FltNum)
- subroutine [getnewunit](#) (UnIn)
- character(200) function [getnvd](#) (ProgInfo)
- subroutine [getpath](#) (GivenFil, PathName)
- subroutine [getroot](#) (GivenFil, RootName)
- subroutine [gettokens](#) (Line, NumTok, Tokens, Error)
- subroutine [getwords](#) (Line, Words, NumWords)
- character(11) function [int2lstr](#) (Intgr)
- subroutine [nameofile](#) (InArg, OutExten, OutFile, ErrStat)
- subroutine [normstop](#)

- subroutine [openbin](#) (Un, OutFile, RecLen, ErrStat)
- subroutine [openbinpfile](#) (Un, InFile, ErrStat)
- subroutine [openecho](#) (Un, OutFile, ErrStat)
- subroutine [openfinpfile](#) (Un, InFile, ErrStat)
- subroutine [openfoutfile](#) (Un, OutFile, ErrStat)
- subroutine [openfunkfile](#) (Un, OutFile, FailAbt, Failed, Exists, ErrStat)
- subroutine [openuinfile](#) (Un, InFile, ErrStat)
- subroutine [openuinbfile](#) (Un, InFile, RecLen, ErrStat)
- subroutine [openuoutfile](#) (Un, OutFile, ErrStat)
- logical function [pathisrelative](#) (GivenFil)
- character(15) function [r2lstr8](#) (FltNum)
- character(15) function [r2lstr16](#) (FltNum)
- subroutine [readcary](#) (UnIn, Fil, CharAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readcarylines](#) (UnIn, Fil, CharAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readcom](#) (UnIn, Fil, ComName, ErrStat)
- subroutine [readcvar](#) (UnIn, Fil, CharVar, VarName, VarDescr, ErrStat)
- subroutine [readfastbin](#) (UnIn, FASTdata, ErrLev, ErrMsg)
- subroutine [readiary](#) (UnIn, Fil, IntAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readivar](#) (UnIn, Fil, IntVar, VarName, VarDescr, ErrStat)
- subroutine [readlary](#) (UnIn, Fil, LogAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readlvar](#) (UnIn, Fil, LogVar, VarName, VarDescr, ErrStat)
- subroutine [readnum](#) (UnIn, Fil, Word, VarName, ErrStat)
- subroutine [readoutputlist](#) (UnIn, Fil, CharAry, AryLenRead, AryName, AryDescr, ErrStat)
- subroutine [readrary](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrarylines](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrarylines4](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrarylines8](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrarylines16](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrvar](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr4var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr8var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr16var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readstr](#) (UnIn, Fil, CharVar, VarName, VarDescr, ErrStat)
- subroutine [waittime](#) (WaitSecs)
- subroutine [wrpr](#) (Str)
- subroutine [wrfilenr](#) (Unit, Str)
- subroutine [wrml](#) (Str)
- subroutine [wrscr1](#) (Str)
- subroutine [adjrealstr](#) (NumStr)
- subroutine [allcary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allcary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allcary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [alliary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [alliary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [alliary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [alllary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [alllary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [alllary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)
- subroutine [allrary1](#) (Ary, AryDim, Descr, ErrStat)
- subroutine [allrary2](#) (Ary, AryDim1, AryDim2, Descr, ErrStat)
- subroutine [allrary3](#) (Ary, AryDim1, AryDim2, AryDim3, Descr, ErrStat)

- subroutine [allrary4](#) (Ary, AryDim1, AryDim2, AryDim3, AryDim4, Descr, ErrStat)
- subroutine [checkios](#) (IOS, Fil, Variable, VarType, TrapErrors)
- subroutine [checkargs](#) (InputFile, ErrStat)
- subroutine [closeecho](#) ()
- subroutine [conv2uc](#) (Str)
- integer function [countwords](#) (Line)
- character(11) function [curdate](#) ()
- character(8) function [curtime](#) ()
- subroutine [dispnvd0](#)
- subroutine [dispnvd1](#) (ProgInfo)
- subroutine [dispnvd2](#) (Name, Ver)
- character(15) function [flt2lstr](#) (FltNum)
- subroutine [getnewunit](#) (UnIn)
- character(200) function [getnvd](#) (ProgInfo)
- subroutine [getpath](#) (GivenFil, PathName)
- subroutine [getroot](#) (GivenFil, RootName)
- subroutine [gettokens](#) (Line, NumTok, Tokens, Error)
- subroutine [getwords](#) (Line, Words, NumWords)
- character(11) function [int2lstr](#) (Intgr)
- subroutine [nameofile](#) (InArg, OutExten, OutFile, ErrStat)
- subroutine [normstop](#)
- subroutine [openbin](#) (Un, OutFile, RecLen, ErrStat)
- subroutine [openbinfile](#) (Un, InFile, ErrStat)
- subroutine [openecho](#) (Un, OutFile, ErrStat)
- subroutine [openfinfile](#) (Un, InFile, ErrStat)
- subroutine [openfoutfile](#) (Un, OutFile, ErrStat)
- subroutine [openfunkfile](#) (Un, OutFile, FailAbt, Failed, Exists, ErrStat)
- subroutine [openuinfile](#) (Un, InFile, ErrStat)
- subroutine [openuinbfile](#) (Un, InFile, RecLen, ErrStat)
- subroutine [openuoutfile](#) (Un, OutFile, ErrStat)
- logical function [pathisrelative](#) (GivenFil)
- character(15) function [r2lstr8](#) (FltNum)
- character(15) function [r2lstr16](#) (FltNum)
- subroutine [readcary](#) (UnIn, Fil, CharAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readcarylines](#) (UnIn, Fil, CharAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readcom](#) (UnIn, Fil, ComName, ErrStat)
- subroutine [readcvar](#) (UnIn, Fil, CharVar, VarName, VarDescr, ErrStat)
- subroutine [readfastbin](#) (UnIn, FASTdata, ErrLev, ErrMsg)
- subroutine [readiary](#) (UnIn, Fil, IntAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readivar](#) (UnIn, Fil, IntVar, VarName, VarDescr, ErrStat)
- subroutine [readlary](#) (UnIn, Fil, LogAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readlvar](#) (UnIn, Fil, LogVar, VarName, VarDescr, ErrStat)
- subroutine [readnum](#) (UnIn, Fil, Word, VarName, ErrStat)
- subroutine [readoutputlist](#) (UnIn, Fil, CharAry, AryLenRead, AryName, AryDescr, ErrStat)
- subroutine [readrary](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrarylines](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrarylines4](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrarylines8](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrarylines16](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readrvar](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr4var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)

- subroutine [readr8var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr16var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readstr](#) (UnIn, Fil, CharVar, VarName, VarDescr, ErrStat)
- subroutine [waittime](#) (WaitSecs)
- subroutine [wrpr](#) (Str)
- subroutine [wrfilenr](#) (Unit, Str)
- subroutine [wrml](#) (Str)
- subroutine [wrscr1](#) (Str)

#### Public Attributes

- integer(intki), parameter [errid\\_none](#) = 0
- integer(intki), parameter [errid\\_info](#) = 1
- integer(intki), parameter [errid\\_warn](#) = 2
- integer(intki), parameter [errid\\_severe](#) = 3
- integer(intki), parameter [errid\\_fatal](#) = 4
- integer(intki) [aborterrlev](#) = ErrID\_Fatal
- integer(intki), parameter [flgtype](#) = 1
- integer(intki), parameter [numtype](#) = 2
- integer(intki), parameter [strtype](#) = 3
- integer [unec](#) = 19
- logical [beep](#) = .TRUE.
- logical [echo](#) = .FALSE.
- type([progdesc](#)), parameter [nwtc\\_ver](#) = ProgDesc( 'NWTC Subroutine Library', 'v1.06.00b-bjj', '07-Dec-2012')
- character(20) [programe](#) = ' '
- character(99) [progver](#)
- character(1), parameter [tab](#) = CHAR( 9 )

#### 3.27.1 Detailed Description

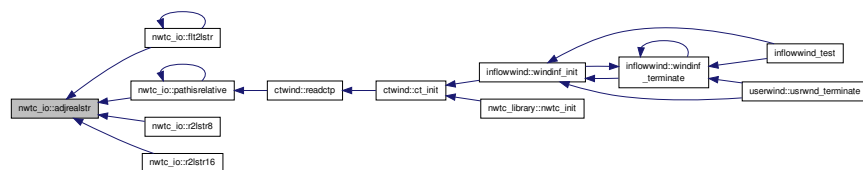
Definition at line 927 of file tempassembled.f90.

#### 3.27.2 Member Function/Subroutine Documentation

##### 3.27.2.1 subroutine [nwtc\\_io::adjrealstr](#) ( character(\*), intent(inout) NumStr )

Definition at line 1117 of file tempassembled.f90.

Here is the caller graph for this function:





### 3.27.2.2 subroutine nwtc\_io::adjrealstr ( character(\*), intent(inout) NumStr )

Definition at line 14987 of file tempassembled.f90.

### 3.27.2.3 subroutine nwtc\_io::adjrealstr ( character(\*), intent(inout) NumStr )

Definition at line 28857 of file tempassembled.f90.

### 3.27.2.4 subroutine nwtc\_io::allcary1 ( character(\*), dimension (:), allocatable Ary, integer, intent(in) AryDim, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 1160 of file tempassembled.f90.

### 3.27.2.5 subroutine nwtc\_io::allcary1 ( character(\*), dimension (:), allocatable Ary, integer, intent(in) AryDim, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 15030 of file tempassembled.f90.

### 3.27.2.6 subroutine nwtc\_io::allcary1 ( character(\*), dimension (:), allocatable Ary, integer, intent(in) AryDim, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 28900 of file tempassembled.f90.

### 3.27.2.7 subroutine nwtc\_io::allcary2 ( character(\*), dimension (:,:), allocatable Ary, integer, intent(in) AryDim1, integer, intent(in) AryDim2, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 15063 of file tempassembled.f90.

### 3.27.2.8 subroutine nwtc\_io::allcary2 ( character(\*), dimension (:,:), allocatable Ary, integer, intent(in) AryDim1, integer, intent(in) AryDim2, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 28933 of file tempassembled.f90.

### 3.27.2.9 subroutine nwtc\_io::allcary2 ( character(\*), dimension (:,:), allocatable Ary, integer, intent(in) AryDim1, integer, intent(in) AryDim2, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 1193 of file tempassembled.f90.

### 3.27.2.10 subroutine nwtc\_io::allcary3 ( character(\*), dimension (:,:,), allocatable Ary, integer, intent(in) AryDim1, integer, intent(in) AryDim2, integer, intent(in) AryDim3, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 1226 of file tempassembled.f90.

### 3.27.2.11 subroutine nwtc\_io::allcary3 ( character(\*), dimension (:,:,), allocatable Ary, integer, intent(in) AryDim1, integer, intent(in) AryDim2, integer, intent(in) AryDim3, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 28966 of file tempassembled.f90.

### 3.27.2.12 subroutine nwtc\_io::allcary3 ( character(\*), dimension (:,:,), allocatable Ary, integer, intent(in) AryDim1, integer, intent(in) AryDim2, integer, intent(in) AryDim3, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 15096 of file tempassembled.f90.

### 3.27.2.13 subroutine nwtc\_io::allary1 ( integer, dimension (:), allocatable Ary, integer, intent(in) AryDim, character(\*), intent(in) Descr, integer, intent(out), optional ErrStat )

Definition at line 29002 of file tempassembled.f90.

3.27.2.14 subroutine nwtc\_io::allary1 ( integer, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15132 of file tempassembled.f90.

3.27.2.15 subroutine nwtc\_io::allary1 ( integer, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1262 of file tempassembled.f90.

3.27.2.16 subroutine nwtc\_io::allary2 ( integer, dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29034 of file tempassembled.f90.

3.27.2.17 subroutine nwtc\_io::allary2 ( integer, dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15164 of file tempassembled.f90.

3.27.2.18 subroutine nwtc\_io::allary2 ( integer, dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1294 of file tempassembled.f90.

3.27.2.19 subroutine nwtc\_io::allary3 ( integer, dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29067 of file tempassembled.f90.

3.27.2.20 subroutine nwtc\_io::allary3 ( integer, dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15197 of file tempassembled.f90.

3.27.2.21 subroutine nwtc\_io::allary3 ( integer, dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1327 of file tempassembled.f90.

3.27.2.22 subroutine nwtc\_io::allary1 ( logical, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1362 of file tempassembled.f90.

3.27.2.23 subroutine nwtc\_io::allary1 ( logical, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29102 of file tempassembled.f90.

3.27.2.24 subroutine nwtc\_io::allary1 ( logical, dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15232 of file tempassembled.f90.

3.27.2.25 subroutine nwtc\_io::allary2 ( logical, dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1396 of file tempassembled.f90.

3.27.2.26 subroutine nwtc\_io::allary2 ( logical, dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29136 of file tempassembled.f90.

3.27.2.27 subroutine nwtc\_io::allary2 ( logical, dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15266 of file tempassembled.f90.

3.27.2.28 subroutine nwtc\_io::allary3 ( logical, dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29171 of file tempassembled.f90.

3.27.2.29 subroutine nwtc\_io::allary3 ( logical, dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1431 of file tempassembled.f90.

3.27.2.30 subroutine nwtc\_io::allary3 ( logical, dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15301 of file tempassembled.f90.

3.27.2.31 subroutine nwtc\_io::allary1 ( real(reki), dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29207 of file tempassembled.f90.

3.27.2.32 subroutine nwtc\_io::allary1 ( real(reki), dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15337 of file tempassembled.f90.

3.27.2.33 subroutine nwtc\_io::allary1 ( real(reki), dimension (:), allocatable *Ary*, integer, intent(in) *AryDim*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1467 of file tempassembled.f90.

3.27.2.34 subroutine nwtc\_io::allary2 ( real(reki), dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29241 of file tempassembled.f90.

3.27.2.35 subroutine nwtc\_io::allary2 ( real(reki), dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15371 of file tempassembled.f90.

3.27.2.36 subroutine nwtc\_io::allrarray2 ( real(reki), dimension (:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1501 of file tempassembled.f90.

3.27.2.37 subroutine nwtc\_io::allrarray3 ( real(reki), dimension (:,:,), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29276 of file tempassembled.f90.

3.27.2.38 subroutine nwtc\_io::allrarray3 ( real(reki), dimension (:,:,), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15406 of file tempassembled.f90.

3.27.2.39 subroutine nwtc\_io::allrarray3 ( real(reki), dimension (:,:,), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1536 of file tempassembled.f90.

3.27.2.40 subroutine nwtc\_io::allrarray4 ( real(reki), dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, integer, intent(in) *AryDim4*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 29312 of file tempassembled.f90.

3.27.2.41 subroutine nwtc\_io::allrarray4 ( real(reki), dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, integer, intent(in) *AryDim4*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 15442 of file tempassembled.f90.

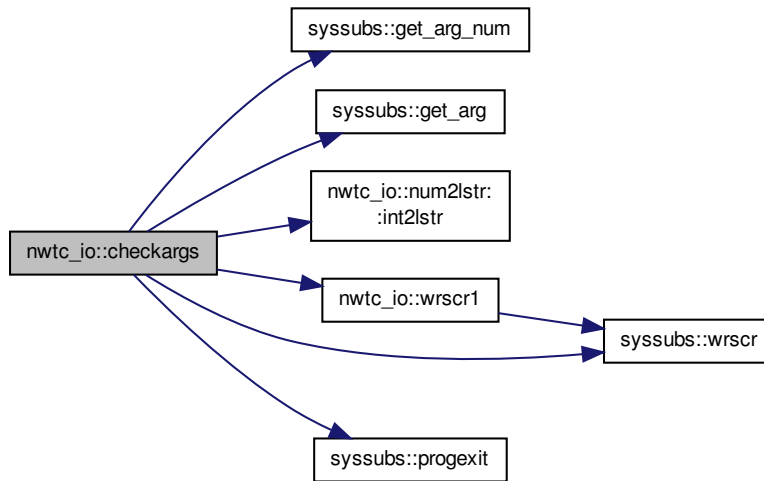
3.27.2.42 subroutine nwtc\_io::allrarray4 ( real(reki), dimension (:,:,:), allocatable *Ary*, integer, intent(in) *AryDim1*, integer, intent(in) *AryDim2*, integer, intent(in) *AryDim3*, integer, intent(in) *AryDim4*, character(\*), intent(in) *Descr*, integer, intent(out), optional *ErrStat* )

Definition at line 1572 of file tempassembled.f90.

3.27.2.43 subroutine nwtc\_io::checkargs ( character(\*), intent(inout) *InputFile*, integer, intent(out), optional *ErrStat* )

Definition at line 1660 of file tempassembled.f90.

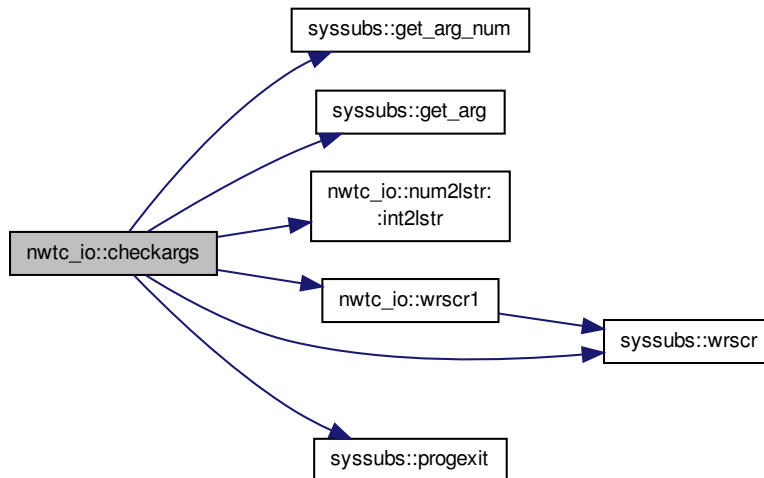
Here is the call graph for this function:



3.27.2.44 subroutine `nwtc_io::checkargs` ( character(\*), intent(inout) *InputFile*, integer, intent(out), optional *ErrStat* )

Definition at line 29400 of file `tempassembled.f90`.

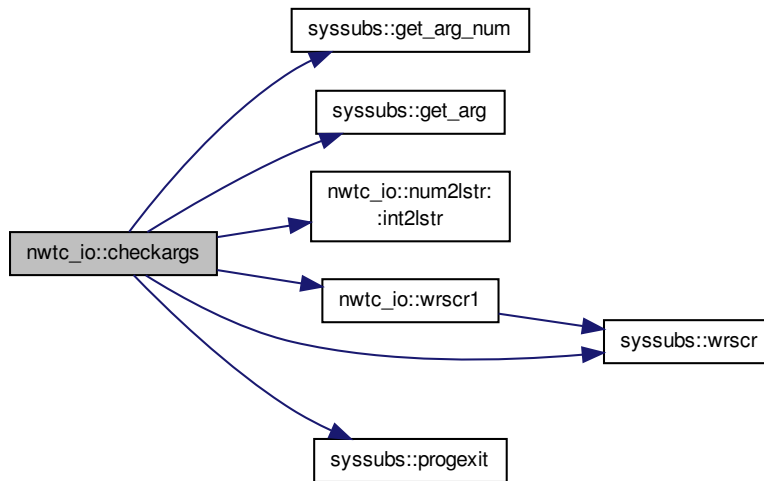
Here is the call graph for this function:



3.27.2.45 subroutine `nwtc_io::checkargs` ( `character(*)`, `intent(inout)` *InputFile*, `integer`, `intent(out)`, optional *ErrStat* )

Definition at line 15530 of file `tempassembled.f90`.

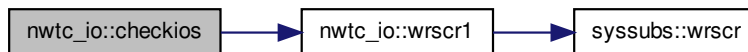
Here is the call graph for this function:



3.27.2.46 subroutine `nwtc_io::checkios` ( `integer`, `intent(in)` *IOS*, `character(*)`, `intent(in)` *Fil*, `character(*)`, `intent(in)` *Variable*, `integer`, `intent(in)` *VarType*, `logical`, `intent(in)`, optional *TrapErrors* )

Definition at line 29350 of file `tempassembled.f90`.

Here is the call graph for this function:



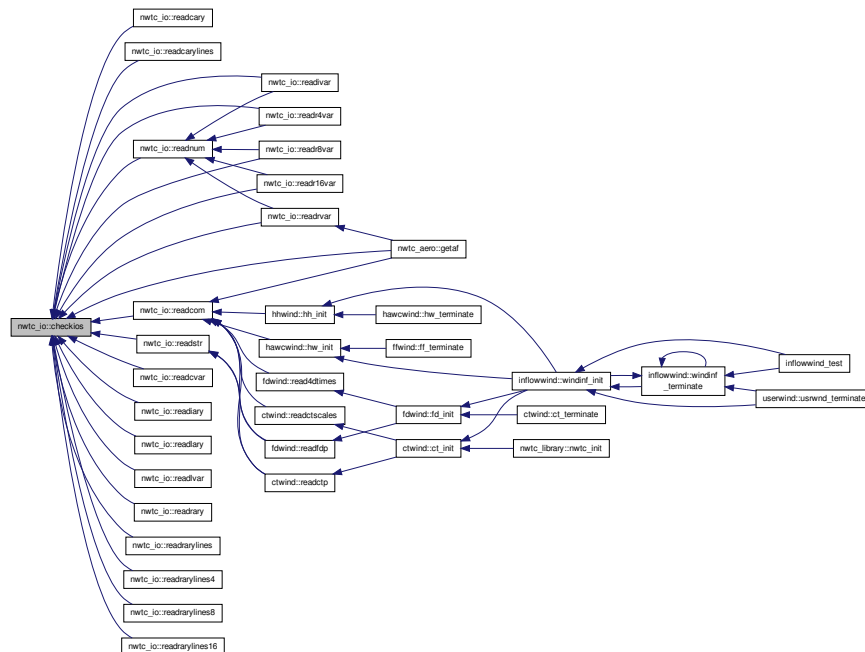
3.27.2.47 subroutine `nwtc_io::checkios` ( `integer`, `intent(in)` *IOS*, `character(*)`, `intent(in)` *Fil*, `character(*)`, `intent(in)` *Variable*, `integer`, `intent(in)` *VarType*, `logical`, `intent(in)`, optional *TrapErrors* )

Definition at line 15480 of file `tempassembled.f90`.

```
graph LR; nwtc_io::checkios --> nwtc_io::wrscr1; nwtc_io::wrscr1 --> syssubs::wrscr
```

Definition at line 1610 of file tempassembled.f90.

```
graph LR; nwtc_io::checkios --> nwtc_io::wrscri; nwtc_io::wrscri --> syssubs::wrscri
```



## 3.27.2.49 subroutine nwtc\_io::closeecho ( )

Definition at line 1747 of file tempassembled.f90.

## 3.27.2.50 subroutine nwtc\_io::closeecho ( )

Definition at line 29487 of file tempassembled.f90.

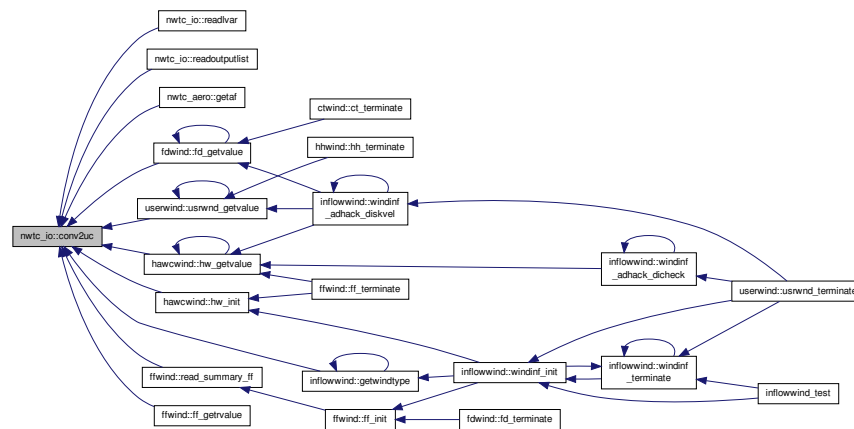
## 3.27.2.51 subroutine nwtc\_io::closeecho ( )

Definition at line 15617 of file tempassembled.f90.

## 3.27.2.52 subroutine nwtc\_io::conv2uc ( character(\*), intent(inout) Str )

Definition at line 1757 of file tempassembled.f90.

Here is the caller graph for this function:



## 3.27.2.53 subroutine nwtc\_io::conv2uc ( character(\*), intent(inout) Str )

Definition at line 29497 of file tempassembled.f90.

## 3.27.2.54 subroutine nwtc\_io::conv2uc ( character(\*), intent(inout) Str )

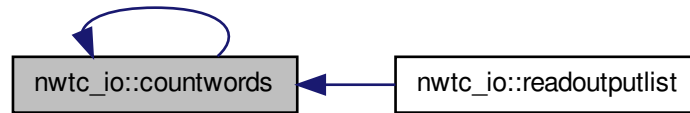
Definition at line 15627 of file tempassembled.f90.

## 3.27.2.55 integer function nwtc\_io::countwords ( character(\*), intent(in) Line )

Definition at line 1788 of file tempassembled.f90.



Here is the caller graph for this function:



#### 3.27.2.56 integer function `nwtc_io::countwords` ( `character(*)`, `intent(in)` *Line* )

Definition at line 29528 of file `tempassembled.f90`.

Here is the call graph for this function:



#### 3.27.2.57 integer function `nwtc_io::countwords` ( `character(*)`, `intent(in)` *Line* )

Definition at line 15658 of file `tempassembled.f90`.

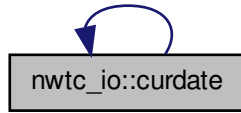
Here is the call graph for this function:



#### 3.27.2.58 `character(11)` function `nwtc_io::curdate` ( )

Definition at line 1847 of file `tempassembled.f90`.

Here is the caller graph for this function:



#### 3.27.2.59 character(11) function nwtc\_io::curdate ( )

Definition at line 29587 of file `tempassembled.f90`.

Here is the call graph for this function:



#### 3.27.2.60 character(11) function nwtc\_io::curdate ( )

Definition at line 15717 of file `tempassembled.f90`.

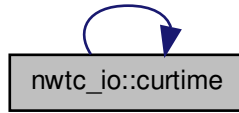
Here is the call graph for this function:



#### 3.27.2.61 character(8) function nwtc\_io::curtime ( )

Definition at line 29652 of file `tempassembled.f90`.

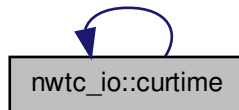
Here is the call graph for this function:



#### 3.27.2.62 character(8) function nwtc\_io::curtime ( )

Definition at line 1912 of file `tempassembled.f90`.

Here is the caller graph for this function:



#### 3.27.2.63 character(8) function nwtc\_io::curtime ( )

Definition at line 15782 of file `tempassembled.f90`.

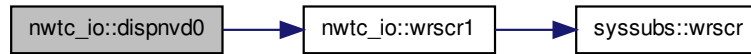
Here is the call graph for this function:



#### 3.27.2.64 subroutine nwtc\_io::dispnvd0 ( )

Definition at line 29677 of file `tempassembled.f90`.

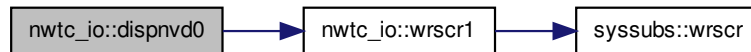
Here is the call graph for this function:



#### 3.27.2.65 subroutine `nwtc_io::dispnvd0` ( )

Definition at line 1937 of file `tempassembled.f90`.

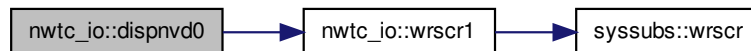
Here is the call graph for this function:



#### 3.27.2.66 subroutine `nwtc_io::dispnvd0` ( )

Definition at line 15807 of file `tempassembled.f90`.

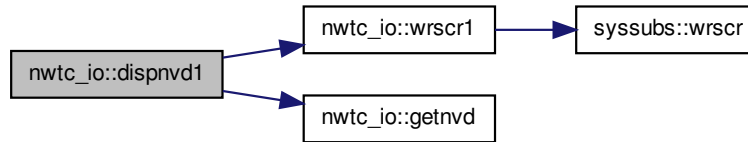
Here is the call graph for this function:



#### 3.27.2.67 subroutine `nwtc_io::dispnvd1` ( `type( progdesc )`, `intent(in) ProgInfo` )

Definition at line 29691 of file `tempassembled.f90`.

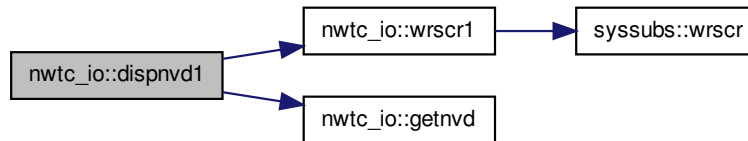
Here is the call graph for this function:



#### 3.27.2.68 subroutine `nwtc_io::dispnvd1` ( type( progdesc ), intent(in) *ProgInfo* )

Definition at line 1951 of file `tempassembled.f90`.

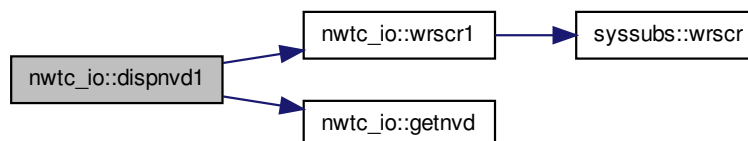
Here is the call graph for this function:



#### 3.27.2.69 subroutine `nwtc_io::dispnvd1` ( type( progdesc ), intent(in) *ProgInfo* )

Definition at line 15821 of file `tempassembled.f90`.

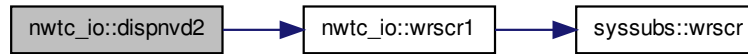
Here is the call graph for this function:



#### 3.27.2.70 subroutine `nwtc_io::dispnvd2` ( character(\*), intent(in) *Name*, character(\*), intent(in) *Ver* )

Definition at line 29709 of file `tempassembled.f90`.

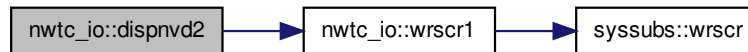
Here is the call graph for this function:



#### 3.27.2.71 subroutine nwtc\_io::dispnvd2 ( character(\*), intent(in) *Name*, character(\*), intent(in) *Ver* )

Definition at line 1969 of file tempassembled.f90.

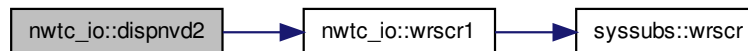
Here is the call graph for this function:



#### 3.27.2.72 subroutine nwtc\_io::dispnvd2 ( character(\*), intent(in) *Name*, character(\*), intent(in) *Ver* )

Definition at line 15839 of file tempassembled.f90.

Here is the call graph for this function:



#### 3.27.2.73 character(15) function nwtc\_io::flt2lstr ( real(*reki*), intent(in) *FltNum* )

Definition at line 29728 of file tempassembled.f90.

Here is the call graph for this function:



#### 3.27.2.74 character(15) function nwtc\_io::flt2lstr ( real(reki), intent(in) *FltNum* )

Definition at line 15858 of file tempassembled.f90.

Here is the call graph for this function:



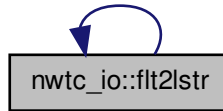
#### 3.27.2.75 character(15) function nwtc\_io::flt2lstr ( real(reki), intent(in) *FltNum* )

Definition at line 1988 of file tempassembled.f90.

Here is the call graph for this function:



Here is the caller graph for this function:



**3.27.2.76** subroutine `nwtc_io::getnewunit` ( integer, intent(out) *UnIn* )

Definition at line 29766 of file `tempassembled.f90`.

**3.27.2.77** subroutine `nwtc_io::getnewunit` ( integer, intent(out) *UnIn* )

Definition at line 15896 of file `tempassembled.f90`.

**3.27.2.78** subroutine `nwtc_io::getnewunit` ( integer, intent(out) *UnIn* )

Definition at line 2026 of file `tempassembled.f90`.

**3.27.2.79** character(200) function `nwtc_io::getnvd` ( type( *progdsc* ), intent(in) *ProgInfo* )

Definition at line 29801 of file `tempassembled.f90`.

Here is the call graph for this function:



**3.27.2.80** character(200) function `nwtc_io::getnvd` ( type( *progdsc* ), intent(in) *ProgInfo* )

Definition at line 15931 of file `tempassembled.f90`.



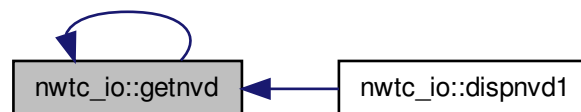
Here is the call graph for this function:



#### 3.27.2.81 character(200) function nwtc\_io::getnvd ( type( progdesc ), intent(in) ProgInfo )

Definition at line 2061 of file tempassembled.f90.

Here is the caller graph for this function:



#### 3.27.2.82 subroutine nwtc\_io::getpath ( character(\*), intent(in) GivenFil, character(\*), intent(out) PathName )

Definition at line 29825 of file tempassembled.f90.

#### 3.27.2.83 subroutine nwtc\_io::getpath ( character(\*), intent(in) GivenFil, character(\*), intent(out) PathName )

Definition at line 15955 of file tempassembled.f90.

#### 3.27.2.84 subroutine nwtc\_io::getpath ( character(\*), intent(in) GivenFil, character(\*), intent(out) PathName )

Definition at line 2085 of file tempassembled.f90.

Here is the caller graph for this function:



3.27.2.85 subroutine nwtc\_io::getroot ( character(\*), intent(in) *GivenFil*, character(\*), intent(out) *RootName* )

Definition at line 29859 of file tempassembled.f90.

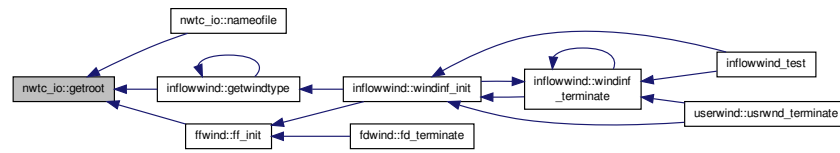
3.27.2.86 subroutine nwtc\_io::getroot ( character(\*), intent(in) *GivenFil*, character(\*), intent(out) *RootName* )

Definition at line 15989 of file tempassembled.f90.

3.27.2.87 subroutine nwtc\_io::getroot ( character(\*), intent(in) *GivenFil*, character(\*), intent(out) *RootName* )

Definition at line 2119 of file tempassembled.f90.

Here is the caller graph for this function:



3.27.2.88 subroutine nwtc\_io::gettokens ( character(\*), intent(inout) *Line*, integer, intent(in) *NumTok*, character(\*), dimension (numtok), intent(out) *Tokens*, logical, intent(out) *Error* )

Definition at line 29919 of file tempassembled.f90.

3.27.2.89 subroutine nwtc\_io::gettokens ( character(\*), intent(inout) *Line*, integer, intent(in) *NumTok*, character(\*), dimension (numtok), intent(out) *Tokens*, logical, intent(out) *Error* )

Definition at line 16049 of file tempassembled.f90.

3.27.2.90 subroutine nwtc\_io::gettokens ( character(\*), intent(inout) *Line*, integer, intent(in) *NumTok*, character(\*), dimension (numtok), intent(out) *Tokens*, logical, intent(out) *Error* )

Definition at line 2179 of file tempassembled.f90.

3.27.2.91 subroutine nwtc\_io::getwords ( character(\*), intent(in) *Line*, character(\*), dimension(numwords), intent(out) *Words*, integer, intent(in) *NumWords* )

Definition at line 29965 of file tempassembled.f90.

3.27.2.92 subroutine nwtc\_io::getwords ( character(\*), intent(in) *Line*, character(\*), dimension(numwords), intent(out) *Words*, integer, intent(in) *NumWords* )

Definition at line 16095 of file tempassembled.f90.

3.27.2.93 subroutine nwtc\_io::getwords ( character(\*), intent(in) *Line*, character(\*), dimension(numwords), intent(out) *Words*, integer, intent(in) *NumWords* )

Definition at line 2225 of file tempassembled.f90.

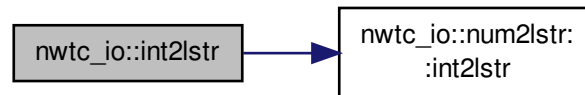
Here is the caller graph for this function:



#### 3.27.2.94 character(11) function nwtc\_io::int2lstr ( integer, intent(in) *Intgr* )

Definition at line 2296 of file `tempassembled.f90`.

Here is the call graph for this function:



#### 3.27.2.95 character(11) function nwtc\_io::int2lstr ( integer, intent(in) *Intgr* )

Definition at line 30036 of file `tempassembled.f90`.

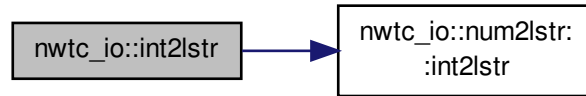
Here is the call graph for this function:



#### 3.27.2.96 character(11) function nwtc\_io::int2lstr ( integer, intent(in) *Intgr* )

Definition at line 16166 of file `tempassembled.f90`.

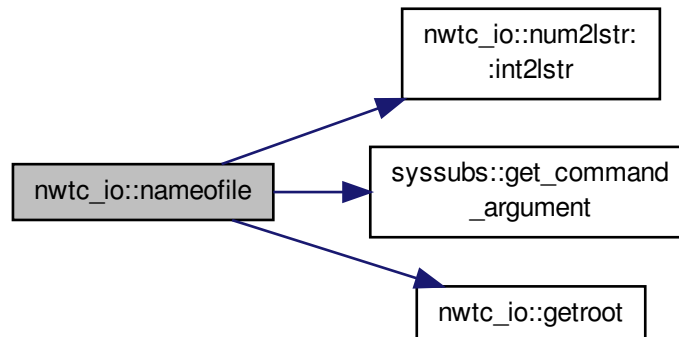
Here is the call graph for this function:



3.27.2.97 subroutine `nwtc_io::nameofile` ( integer, intent(in) *InArg*, character(\*), intent(in) *OutExten*, character(\*), intent(out) *OutFile*, integer, intent(out), optional *ErrStat* )

Definition at line 2320 of file `tempassembled.f90`.

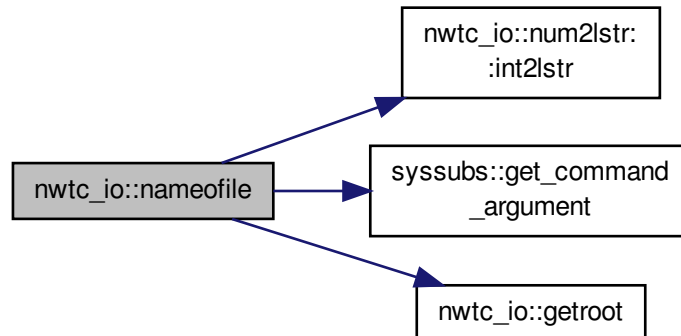
Here is the call graph for this function:



3.27.2.98 subroutine `nwtc_io::nameofile` ( integer, intent(in) *InArg*, character(\*), intent(in) *OutExten*, character(\*), intent(out) *OutFile*, integer, intent(out), optional *ErrStat* )

Definition at line 30060 of file `tempassembled.f90`.

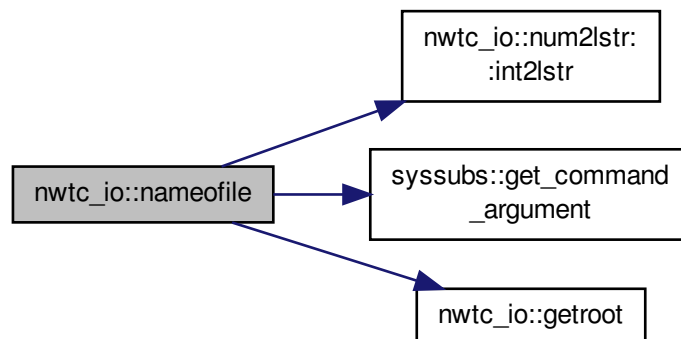
Here is the call graph for this function:



3.27.2.99 subroutine `nwtc_io::nameofile` ( integer, intent(in) *InArg*, character(\*), intent(in) *OutExten*, character(\*), intent(out) *OutFile*, integer, intent(out), optional *ErrStat* )

Definition at line 16190 of file `tempassembled.f90`.

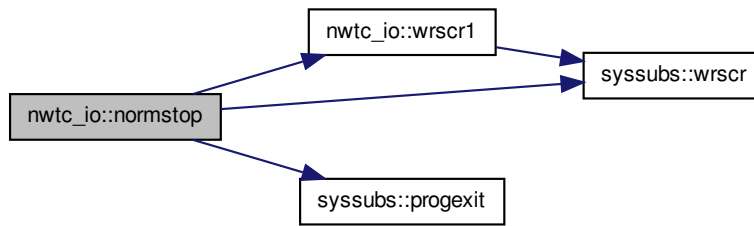
Here is the call graph for this function:



3.27.2.100 subroutine `nwtc_io::normstop` ( )

Definition at line 2365 of file `tempassembled.f90`.

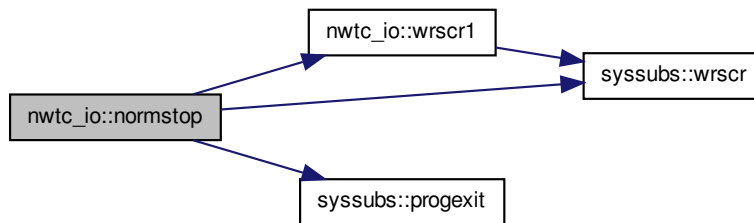
Here is the call graph for this function:



#### 3.27.2.101 subroutine `nwtc_io::normstop` ( )

Definition at line 30105 of file `tempassembled.f90`.

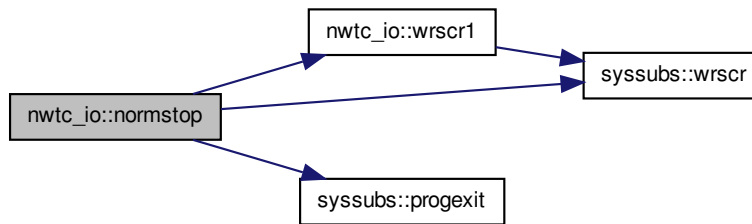
Here is the call graph for this function:



#### 3.27.2.102 subroutine `nwtc_io::normstop` ( )

Definition at line 16235 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.103 subroutine `nwtc_io::openbin` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(in) *RecLen*, integer, intent(out), optional *ErrStat* )

Definition at line 2378 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.104 subroutine `nwtc_io::openbin` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(in) *RecLen*, integer, intent(out), optional *ErrStat* )

Definition at line 16248 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.105 subroutine `nwtc_io::openbin` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(in) *RecLen*, integer, intent(out), optional *ErrStat* )

Definition at line 30118 of file `tempassembled.f90`.

Here is the call graph for this function:



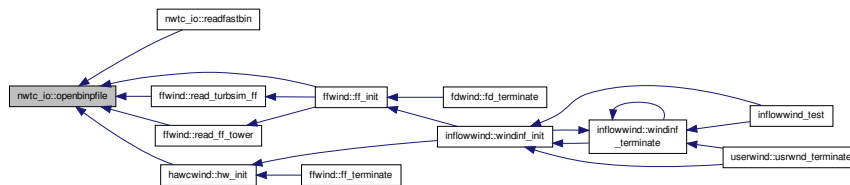
3.27.2.106 subroutine `nwtc_io::openbinpfile` ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(out), optional *ErrStat* )

Definition at line 2415 of file `tempassembled.f90`.

Here is the call graph for this function:



Here is the caller graph for this function:



3.27.2.107 subroutine `nwtc_io::openbinpfile` ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(out), optional *ErrStat* )

Definition at line 30155 of file `tempassembled.f90`.



Here is the call graph for this function:



3.27.2.108 subroutine `nwtc_io::openbinpfile` ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(out), optional *ErrStat* )

Definition at line 16285 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.109 subroutine `nwtc_io::openecho` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(out), optional *ErrStat* )

Definition at line 2473 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.110 subroutine `nwtc_io::openecho` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(out), optional *ErrStat* )

Definition at line 30213 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.111 subroutine `nwtc_io::openecho` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(out), optional *ErrStat* )

Definition at line 16343 of file `tempassembled.f90`.

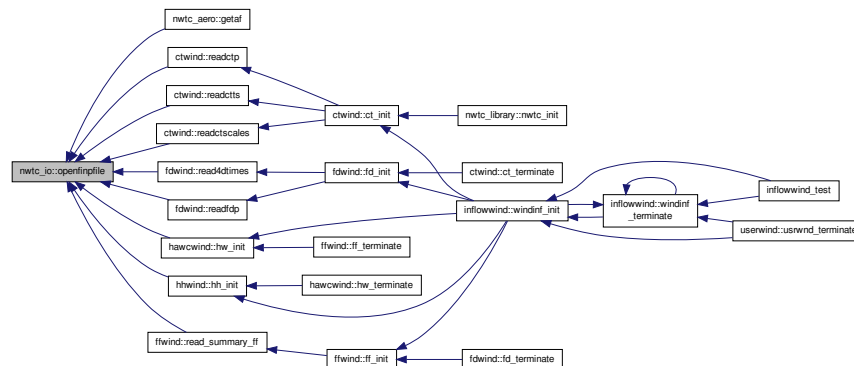
Here is the call graph for this function:



3.27.2.112 subroutine `nwtc_io::openfinfile` ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(out), optional *ErrStat* )

Definition at line 2506 of file `tempassembled.f90`.

Here is the caller graph for this function:



3.27.2.113 subroutine `nwtc_io::openfinfile` ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(out), optional *ErrStat* )

Definition at line 30246 of file `tempassembled.f90`.

3.27.2.114 subroutine `nwtc_io::openfinfile` ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(out), optional *ErrStat* )

Definition at line 16376 of file `tempassembled.f90`.

3.27.2.115 subroutine `nwtc_io::openfoutfile` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(out), optional *ErrStat* )

Definition at line 30295 of file `tempassembled.f90`.

3.27.2.116 subroutine `nwtc_io::openfoutfile` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(out), optional *ErrStat* )

Definition at line 2555 of file `tempassembled.f90`.

Here is the caller graph for this function:



3.27.2.117 subroutine `nwtc_io::openfoutfile` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(out), optional *ErrStat* )

Definition at line 16425 of file `tempassembled.f90`.

3.27.2.118 subroutine `nwtc_io::openfunkfile` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, logical, intent(in) *FailAbt*, logical, intent(out) *Failed*, logical, intent(out) *Exists*, integer, intent(out), optional *ErrStat* )

Definition at line 2590 of file `tempassembled.f90`.

3.27.2.119 subroutine `nwtc_io::openfunkfile` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, logical, intent(in) *FailAbt*, logical, intent(out) *Failed*, logical, intent(out) *Exists*, integer, intent(out), optional *ErrStat* )

Definition at line 30330 of file `tempassembled.f90`.

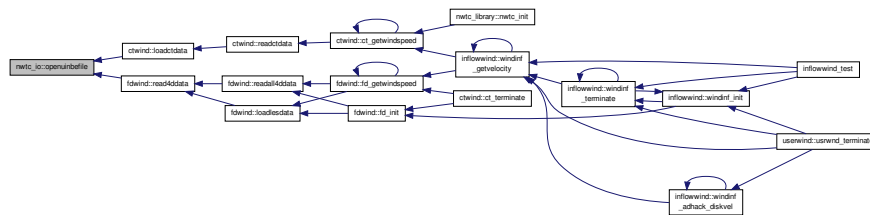
3.27.2.120 subroutine `nwtc_io::openfunkfile` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, logical, intent(in) *FailAbt*, logical, intent(out) *Failed*, logical, intent(out) *Exists*, integer, intent(out), optional *ErrStat* )

Definition at line 16460 of file `tempassembled.f90`.

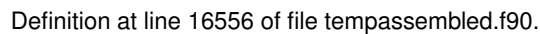
3.27.2.121 subroutine `nwtc_io::openuinbefile` ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(in) *RecLen*, integer, intent(out), optional *ErrStat* )

Definition at line 2686 of file `tempassembled.f90`.

Here is the caller graph for this function:



Here is the call graph for this function:



Here is the call graph for this function:



3.27.2.124 subroutine `nwtc_io::openuinfile` ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(out), optional *ErrStat* )

Definition at line 30379 of file `tempassembled.f90`.

3.27.2.125 subroutine `nwtc_io::openuinfile` ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(out), optional *ErrStat* )

Definition at line 2639 of file `tempassembled.f90`.

3.27.2.126 subroutine `nwtc_io::openuinfile` ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(out), optional *ErrStat* )

Definition at line 16509 of file `tempassembled.f90`.

3.27.2.127 subroutine `nwtc_io::openuoutfile` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(out), optional *ErrStat* )

Definition at line 30480 of file `tempassembled.f90`.

3.27.2.128 subroutine `nwtc_io::openuoutfile` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(out), optional *ErrStat* )

Definition at line 2740 of file `tempassembled.f90`.

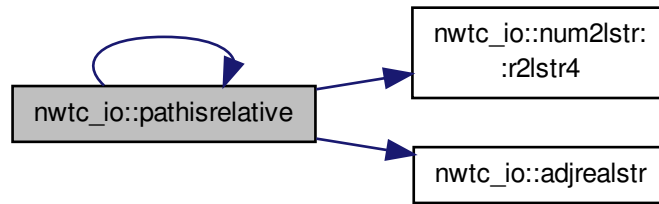
3.27.2.129 subroutine `nwtc_io::openuoutfile` ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(out), optional *ErrStat* )

Definition at line 16610 of file `tempassembled.f90`.

3.27.2.130 logical function `nwtc_io::pathisrelative` ( character(\*), intent(in) *GivenFil* )

Definition at line 30514 of file `tempassembled.f90`.

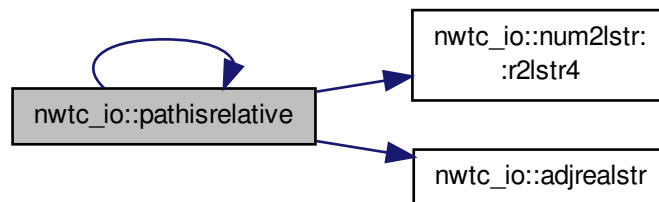
Here is the call graph for this function:



### 3.27.2.131 logical function `nwtc_io::pathisrelative ( character(*), intent(in) GivenFil )`

Definition at line 2774 of file `tempassembled.f90`.

Here is the call graph for this function:



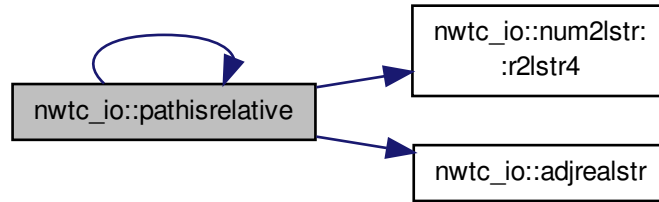
Here is the caller graph for this function:



### 3.27.2.132 logical function `nwtc_io::pathisrelative ( character(*), intent(in) GivenFil )`

Definition at line 16644 of file `tempassembled.f90`.

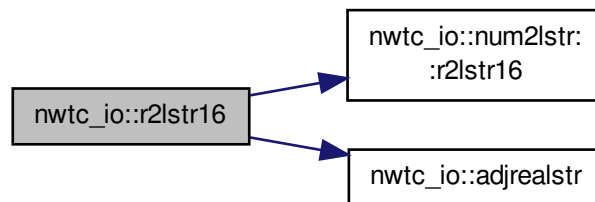
Here is the call graph for this function:



#### 3.27.2.133 character(15) function nwtc\_io::r2lstr16 ( real(quki), intent(in) *FitNum* )

Definition at line 2963 of file `tempassembled.f90`.

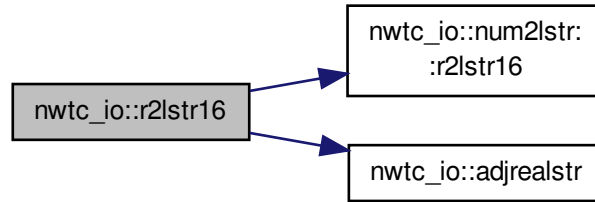
Here is the call graph for this function:



#### 3.27.2.134 character(15) function nwtc\_io::r2lstr16 ( real(quki), intent(in) *FitNum* )

Definition at line 30703 of file `tempassembled.f90`.

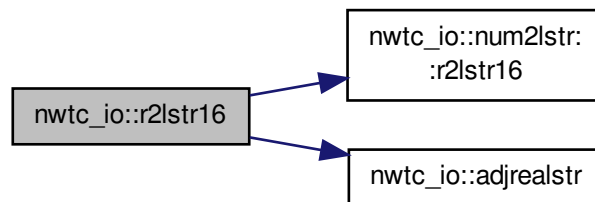
Here is the call graph for this function:



#### 3.27.2.135 character(15) function nwtc\_io::r2lstr16 ( real(quki), intent(in) *FitNum* )

Definition at line 16833 of file `tempassembled.f90`.

Here is the call graph for this function:

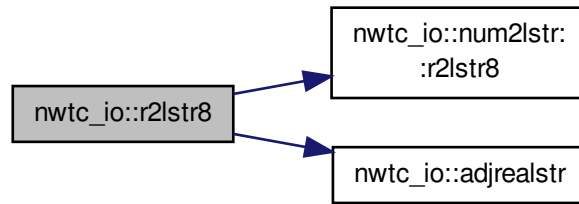


#### 3.27.2.136 character(15) function nwtc\_io::r2lstr8 ( real(r8ki), intent(in) *FitNum* )

Definition at line 2928 of file `tempassembled.f90`.



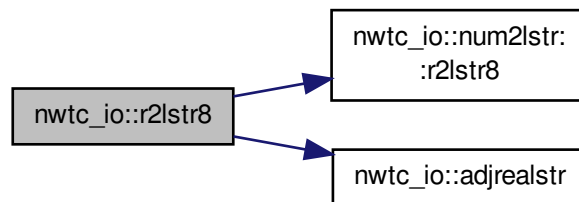
Here is the call graph for this function:



#### 3.27.2.137 character(15) function nwtc\_io::r2lstr8 ( real(r8ki), intent(in) *FltNum* )

Definition at line 16798 of file `tempassembled.f90`.

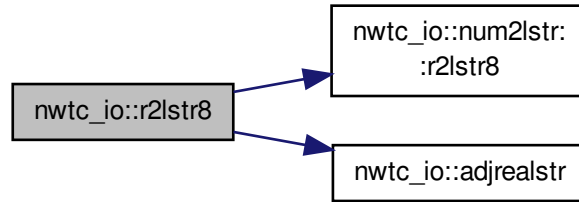
Here is the call graph for this function:



#### 3.27.2.138 character(15) function nwtc\_io::r2lstr8 ( real(r8ki), intent(in) *FltNum* )

Definition at line 30668 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.139 subroutine `nwtc_io::readcary` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(arylen), intent(out) *CharAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 2999 of file `tempassembled.f90`.

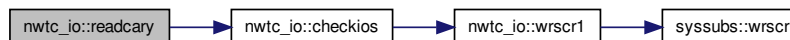
Here is the call graph for this function:



3.27.2.140 subroutine `nwtc_io::readcary` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(arylen), intent(out) *CharAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 30739 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.141 subroutine `nwtc_io::readcary` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(arylen), intent(out) *CharAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 16869 of file `tempassembled.f90`.

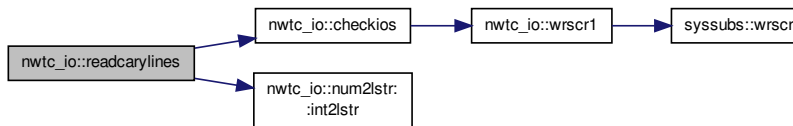
Here is the call graph for this function:



**3.27.2.142** subroutine `nwtc_io::readcarylines` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(arylen), intent(out) *CharAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 30783 of file `tempassembled.f90`.

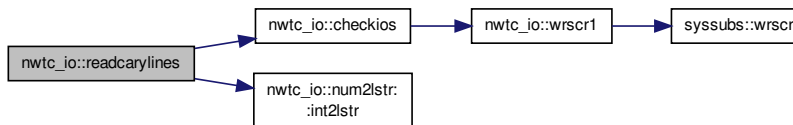
Here is the call graph for this function:



**3.27.2.143** subroutine `nwtc_io::readcarylines` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(arylen), intent(out) *CharAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3043 of file `tempassembled.f90`.

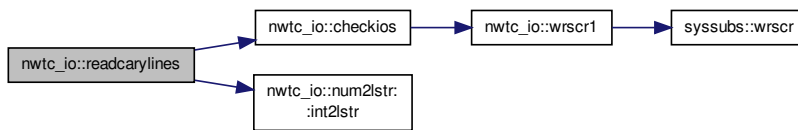
Here is the call graph for this function:



**3.27.2.144** subroutine `nwtc_io::readcarylines` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(arylen), intent(out) *CharAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 16913 of file `tempassembled.f90`.

Here is the call graph for this function:



**3.27.2.145** subroutine `nwtc_io::readcom` ( integer, intent(in) *Unln*, character(\*), intent(in) *Fil*, character(\*), intent(in) *ComName*, integer, intent(out), optional *ErrStat* )

Definition at line 30830 of file `tempassembled.f90`.

Here is the call graph for this function:



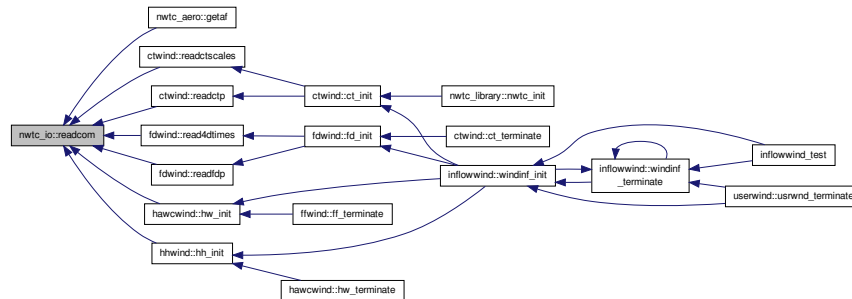
**3.27.2.146** subroutine `nwtc_io::readcom` ( integer, intent(in) *Unln*, character(\*), intent(in) *Fil*, character(\*), intent(in) *ComName*, integer, intent(out), optional *ErrStat* )

Definition at line 3090 of file `tempassembled.f90`.

Here is the call graph for this function:



Here is the caller graph for this function:



**3.27.2.147** subroutine `nwtc_io::readcom` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), intent(in) *ComName*, integer, intent(out), optional *ErrStat* )

Definition at line 16960 of file `tempassembled.f90`.

Here is the call graph for this function:



**3.27.2.148** subroutine `nwtc_io::readcvar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), intent(out) *CharVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 30869 of file `tempassembled.f90`.

Here is the call graph for this function:



**3.27.2.149** subroutine `nwtc_io::readcvar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), intent(out) *CharVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3129 of file `tempassembled.f90`.

Here is the call graph for this function:



**3.27.2.150** subroutine `nwtc_io::readcvar` ( integer, intent(in) *Unln*, character(\*), intent(in) *Fil*, character(\*), intent(out) *CharVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 16999 of file `tempassembled.f90`.

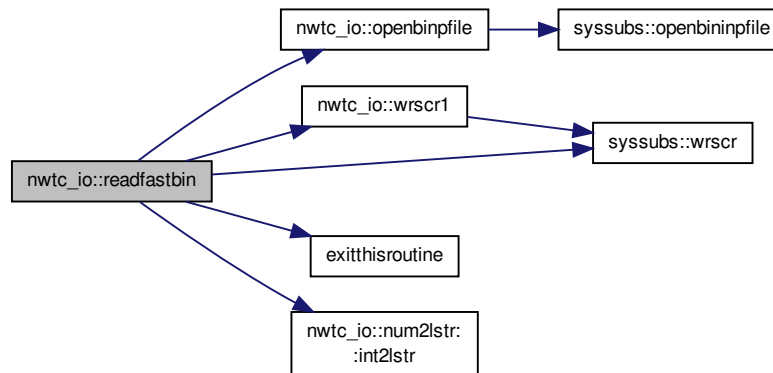
Here is the call graph for this function:



**3.27.2.151** subroutine `nwtc_io::readfastbin` ( integer(intki), intent(inout) *Unln*, type (fastdatatype), intent(inout) *FASTdata*, integer(intki), intent(out), optional *ErrLev*, character(\*), intent(out), optional *ErrMsg* )

Definition at line 17042 of file `tempassembled.f90`.

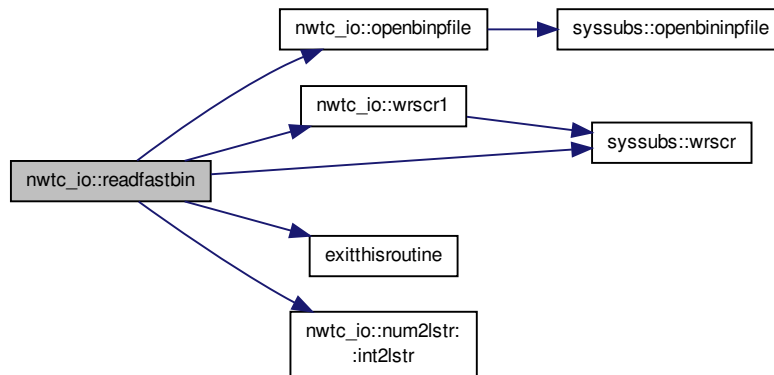
Here is the call graph for this function:



**3.27.2.152** subroutine `nwtc_io::readfastbin` ( integer(intki), intent(inout) *Unln*, type (fastdatatype), intent(inout) *FASTdata*, integer(intki), intent(out), optional *ErrLev*, character(\*), intent(out), optional *ErrMsg* )

Definition at line 30912 of file `tempassembled.f90`.

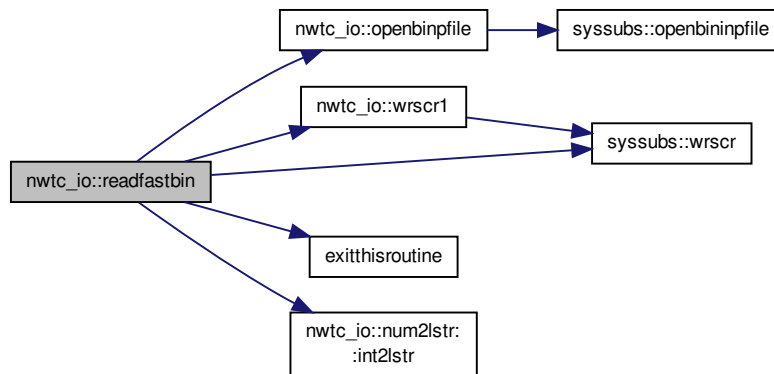
Here is the call graph for this function:



3.27.2.153 subroutine `nwtc_io::readfastbin` ( integer(intki), intent(inout) *Unln*, type(fastdatatype), intent(inout) *FASTdata*, integer(intki), intent(out), optional *ErrLev*, character(\*), intent(out), optional *ErrMsg* )

Definition at line 3172 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.154 subroutine `nwtc_io::readiary` ( integer, intent(in) *Unln*, character(\*), intent(in) *Fil*, integer, dimension(arylen), intent(out) *IntAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31244 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.155 subroutine `nwtc_io::readiary` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, integer, dimension(arylen), intent(out) *IntAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3504 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.156 subroutine `nwtc_io::readiary` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, integer, dimension(arylen), intent(out) *IntAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17374 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.157 subroutine `nwtc_io::readivar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, integer, intent(out) *IntVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31290 of file `tempassembled.f90`.

Here is the call graph for this function:

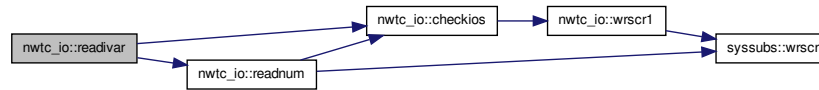




3.27.2.158 subroutine `nwtc_io::readivar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, integer, intent(out) *IntVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3550 of file `tempassembled.f90`.

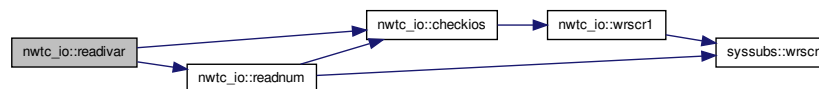
Here is the call graph for this function:



3.27.2.159 subroutine `nwtc_io::readivar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, integer, intent(out) *IntVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17420 of file `tempassembled.f90`.

Here is the call graph for this function:



3.27.2.160 subroutine `nwtc_io::readlary` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, logical, dimension(arylen), intent(out) *LogAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31340 of file `tempassembled.f90`.

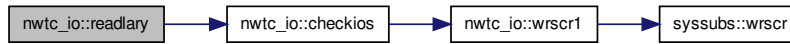
Here is the call graph for this function:



3.27.2.161 subroutine `nwtc_io::readlary` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, logical, dimension(arylen), intent(out) *LogAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3600 of file `tempassembled.f90`.

Here is the call graph for this function:



**3.27.2.162** subroutine `nwtc_io::readlary` ( integer, intent(in) *Unln*, character(\*), intent(in) *Fil*, logical, dimension(arylen), intent(out) *LogAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17470 of file `tempassembled.f90`.

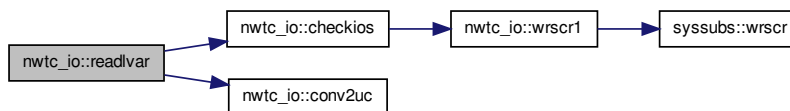
Here is the call graph for this function:



**3.27.2.163** subroutine `nwtc_io::readlvar` ( integer, intent(in) *Unln*, character(\*), intent(in) *Fil*, logical, intent(out) *LogVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31387 of file `tempassembled.f90`.

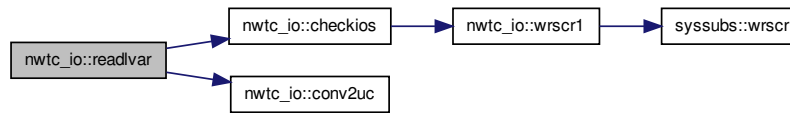
Here is the call graph for this function:



**3.27.2.164** subroutine `nwtc_io::readlvar` ( integer, intent(in) *Unln*, character(\*), intent(in) *Fil*, logical, intent(out) *LogVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17517 of file `tempassembled.f90`.

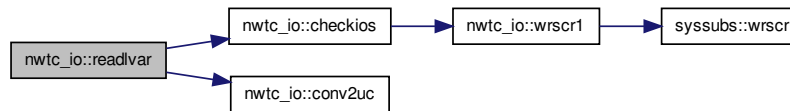
Here is the call graph for this function:



**3.27.2.165** subroutine `nwtc_io::readlvar` ( integer, intent(in) *Unln*, character(\*), intent(in) *Fil*, logical, intent(out) *LogVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3647 of file `tempassembled.f90`.

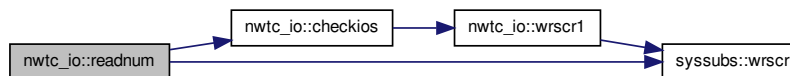
Here is the call graph for this function:



**3.27.2.166** subroutine `nwtc_io::readnum` ( integer, intent(in) *Unln*, character(\*), intent(in) *Fil*, character(\*), intent(out) *Word*, character(\*), intent(in) *VarName*, integer, intent(out), optional *ErrStat* )

Definition at line 17566 of file `tempassembled.f90`.

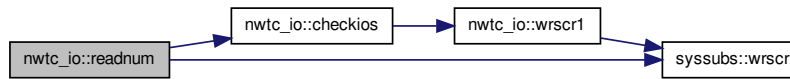
Here is the call graph for this function:



**3.27.2.167** subroutine `nwtc_io::readnum` ( integer, intent(in) *Unln*, character(\*), intent(in) *Fil*, character(\*), intent(out) *Word*, character(\*), intent(in) *VarName*, integer, intent(out), optional *ErrStat* )

Definition at line 31436 of file `tempassembled.f90`.

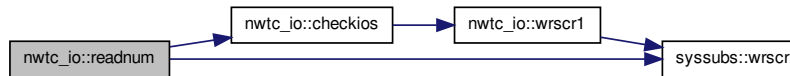
Here is the call graph for this function:



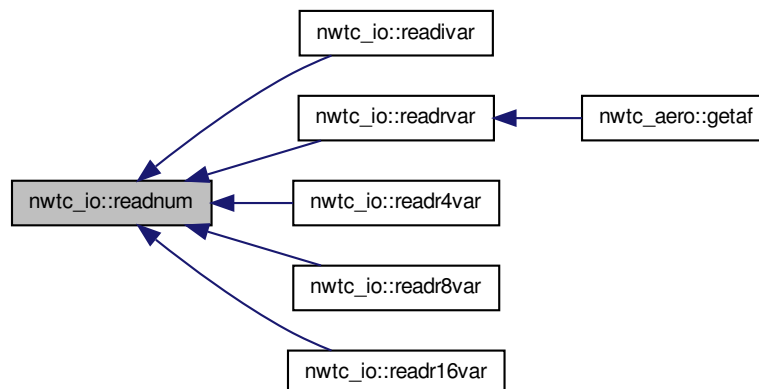
**3.27.2.168** subroutine `nwtc_io::readnum` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), intent(out) *Word*, character(\*), intent(in) *VarName*, integer, intent(out), optional *ErrStat* )

Definition at line 3696 of file `tempassembled.f90`.

Here is the call graph for this function:



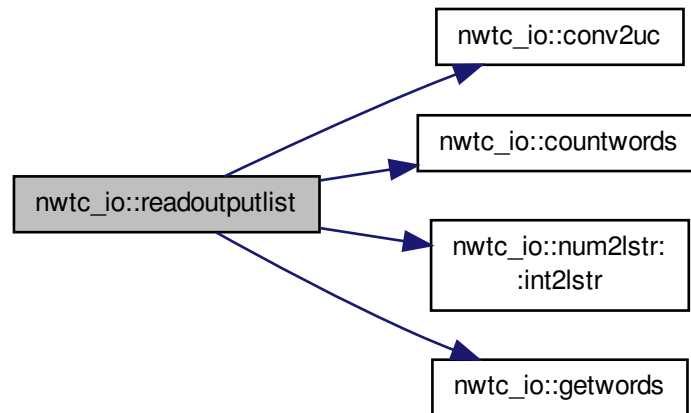
Here is the caller graph for this function:



**3.27.2.169** subroutine `nwtc_io::readoutputlist` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(:), intent(out) *CharAry*, integer, intent(out) *AryLenRead*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3747 of file `tempassembled.f90`.

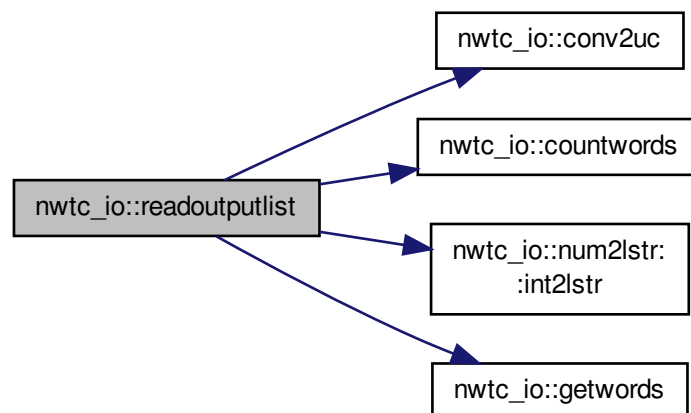
Here is the call graph for this function:



3.27.2.170 subroutine `nwtc_io::readoutputlist` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(:), intent(out) *CharAry*, integer, intent(out) *AryLenRead*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31487 of file `tempassembled.f90`.

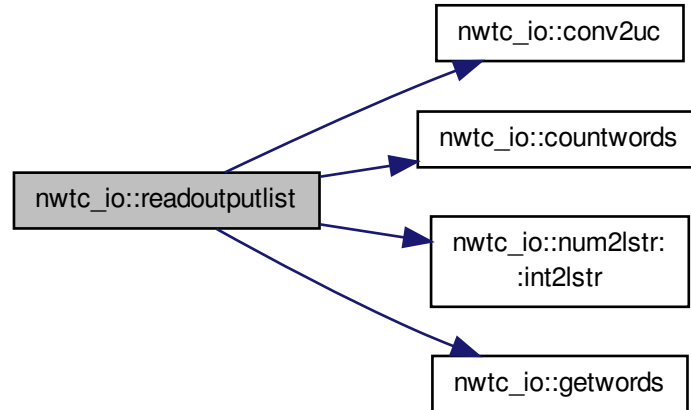
Here is the call graph for this function:



3.27.2.171 subroutine `nwtc_io::readoutputlist` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(:), intent(out) *CharAry*, integer, intent(out) *AryLenRead*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17617 of file `tempassembled.f90`.

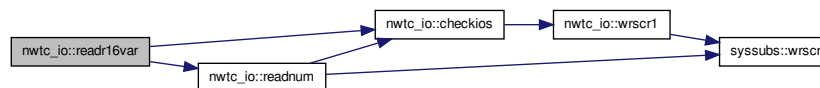
Here is the call graph for this function:



3.27.2.172 subroutine `nwtc_io::readr16var` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(quki), intent(out) *RealVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 4219 of file `tempassembled.f90`.

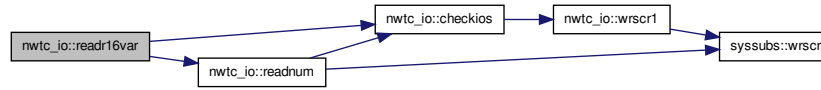
Here is the call graph for this function:



3.27.2.173 subroutine `nwtc_io::readr16var` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(quki), intent(out) *RealVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 18089 of file `tempassembled.f90`.

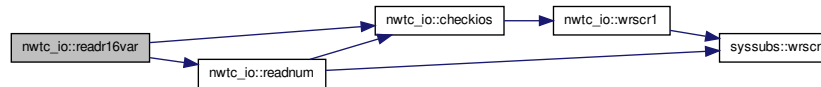
Here is the call graph for this function:



**3.27.2.174** subroutine `nwtc_io::readr16var` ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(quki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31959 of file `tempassembled.f90`.

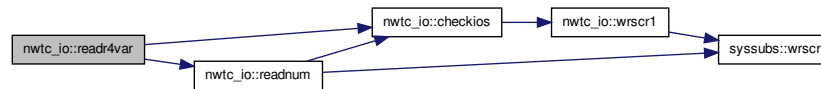
Here is the call graph for this function:



**3.27.2.175** subroutine `nwtc_io::readr4var` ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(siki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31857 of file `tempassembled.f90`.

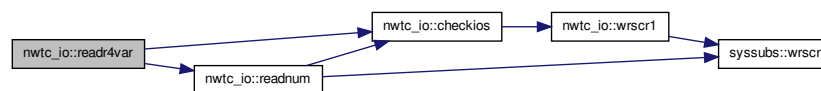
Here is the call graph for this function:



**3.27.2.176** subroutine `nwtc_io::readr4var` ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(siki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17987 of file `tempassembled.f90`.

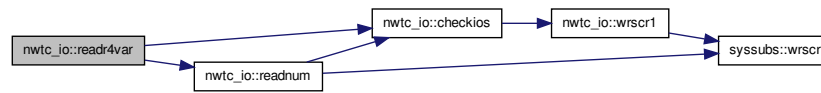
Here is the call graph for this function:



3.27.2.177 subroutine `nwtc_io::readr4var` ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(siki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 4117 of file `tempassembled.f90`.

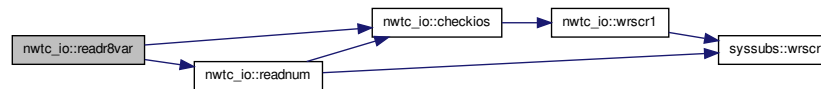
Here is the call graph for this function:



3.27.2.178 subroutine `nwtc_io::readr8var` ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(r8ki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 4168 of file `tempassembled.f90`.

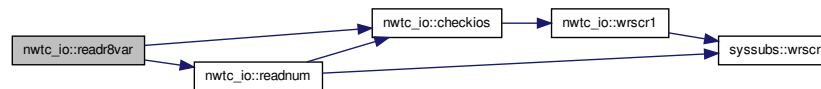
Here is the call graph for this function:



3.27.2.179 subroutine `nwtc_io::readr8var` ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(r8ki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 18038 of file `tempassembled.f90`.

Here is the call graph for this function:

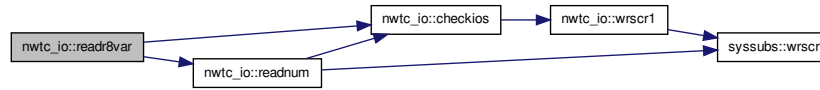


3.27.2.180 subroutine `nwtc_io::readr8var` ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(r8ki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31908 of file `tempassembled.f90`.



Here is the call graph for this function:



**3.27.2.181** subroutine `nwtc_io::readr4` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(*reki*), dimension(*arylen*), intent(inout) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31570 of file `tempassembled.f90`.

Here is the call graph for this function:



**3.27.2.182** subroutine `nwtc_io::readr4` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(*reki*), dimension(*arylen*), intent(inout) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3830 of file `tempassembled.f90`.

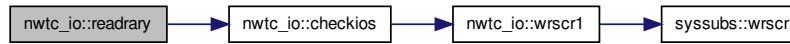
Here is the call graph for this function:



**3.27.2.183** subroutine `nwtc_io::readr4` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(*reki*), dimension(*arylen*), intent(inout) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17700 of file `tempassembled.f90`.

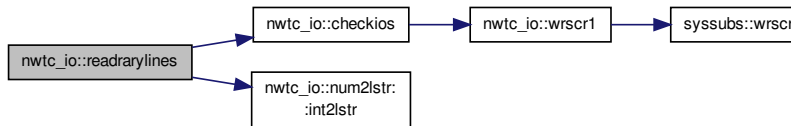
Here is the call graph for this function:



**3.27.2.184** subroutine `nwtc_io::readrarraylines` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(reki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17747 of file `tempassembled.f90`.

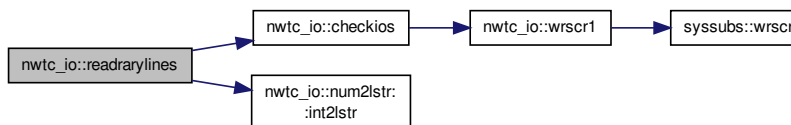
Here is the call graph for this function:



**3.27.2.185** subroutine `nwtc_io::readrarraylines` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(reki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31617 of file `tempassembled.f90`.

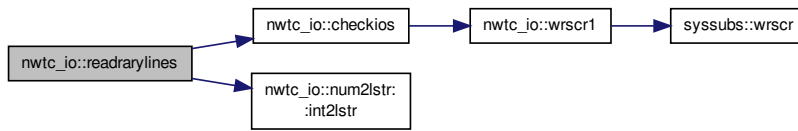
Here is the call graph for this function:



**3.27.2.186** subroutine `nwtc_io::readrarraylines` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(reki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3877 of file `tempassembled.f90`.

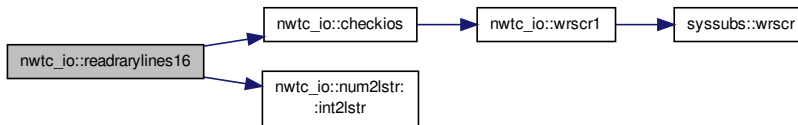
Here is the call graph for this function:



**3.27.2.187** subroutine `nwtc_io::readrarraylines16` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(quki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 4018 of file `tempassembled.f90`.

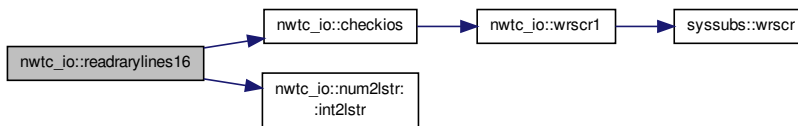
Here is the call graph for this function:



**3.27.2.188** subroutine `nwtc_io::readrarraylines16` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(quki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17888 of file `tempassembled.f90`.

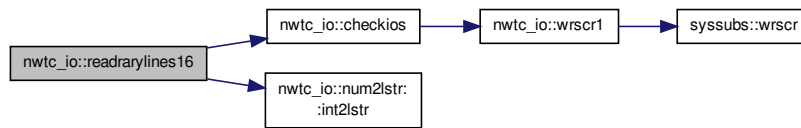
Here is the call graph for this function:



**3.27.2.189** subroutine `nwtc_io::readrarraylines16` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(quki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31758 of file `tempassembled.f90`.

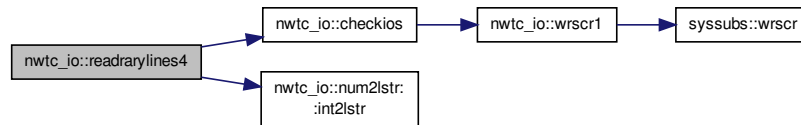
Here is the call graph for this function:



**3.27.2.190** subroutine `nwtc_io::readrarraylines4` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(siki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3924 of file `tempassembled.f90`.

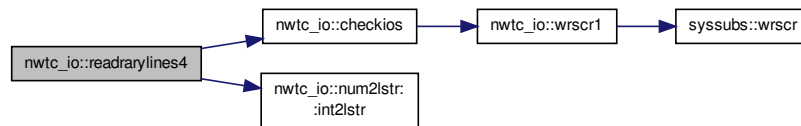
Here is the call graph for this function:



**3.27.2.191** subroutine `nwtc_io::readrarraylines4` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(siki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17794 of file `tempassembled.f90`.

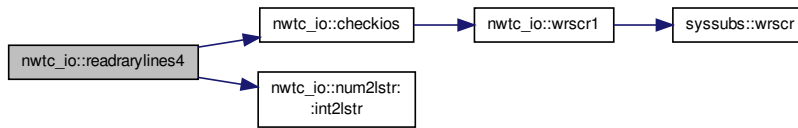
Here is the call graph for this function:



**3.27.2.192** subroutine `nwtc_io::readrarraylines4` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(siki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31664 of file `tempassembled.f90`.

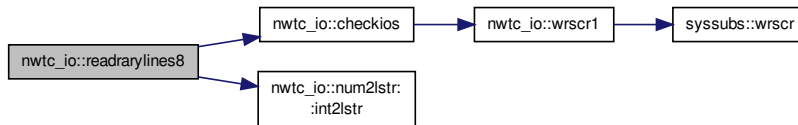
Here is the call graph for this function:



**3.27.2.193** subroutine `nwtc_io::readrarraylines8` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(r8ki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31711 of file `tempassembled.f90`.

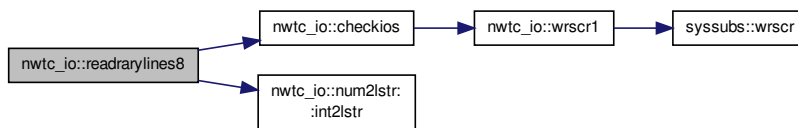
Here is the call graph for this function:



**3.27.2.194** subroutine `nwtc_io::readrarraylines8` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(r8ki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3971 of file `tempassembled.f90`.

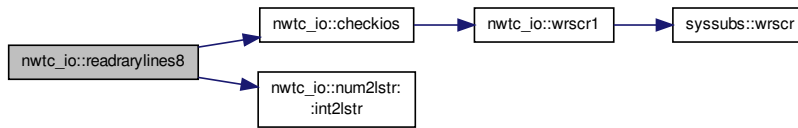
Here is the call graph for this function:



**3.27.2.195** subroutine `nwtc_io::readrarraylines8` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(r8ki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17841 of file `tempassembled.f90`.

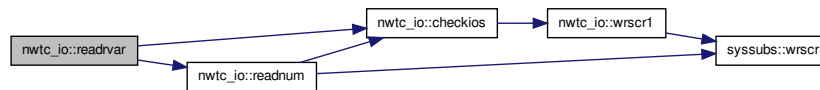
Here is the call graph for this function:



**3.27.2.196** subroutine `nwtc_io::readrvar` ( integer, intent(in) *Unln*, character( \*) , intent(in) *Fil*, real(*reki*), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17935 of file `tempassembled.f90`.

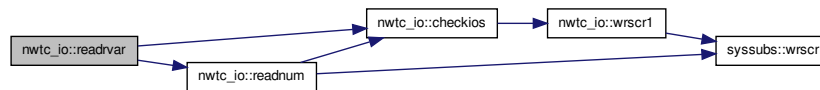
Here is the call graph for this function:



**3.27.2.197** subroutine `nwtc_io::readrvar` ( integer, intent(in) *Unln*, character( \*) , intent(in) *Fil*, real(*reki*), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31805 of file `tempassembled.f90`.

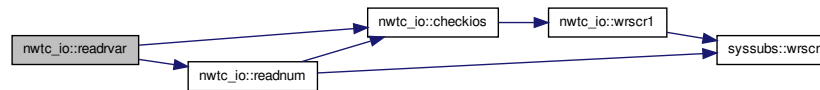
Here is the call graph for this function:



**3.27.2.198** subroutine `nwtc_io::readrvar` ( integer, intent(in) *Unln*, character( \*) , intent(in) *Fil*, real(*reki*), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 4065 of file `tempassembled.f90`.

Here is the call graph for this function:



Here is the caller graph for this function:



**3.27.2.199** subroutine `nwtc_io::readstr` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), intent(out) *CharVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 32010 of file `tempassembled.f90`.

Here is the call graph for this function:



**3.27.2.200** subroutine `nwtc_io::readstr` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), intent(out) *CharVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 18140 of file `tempassembled.f90`.

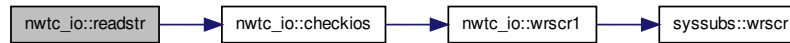
Here is the call graph for this function:



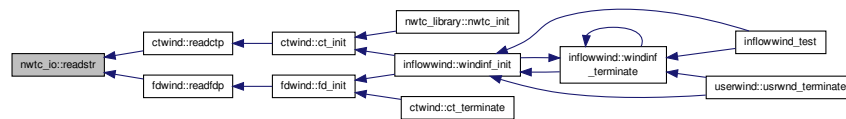
3.27.2.201 subroutine `nwtc_io::readstr` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), intent(out) *CharVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 4270 of file `tempassembled.f90`.

Here is the call graph for this function:



Here is the caller graph for this function:



3.27.2.202 subroutine `nwtc_io::waittime` ( real(*reki*), intent(in) *WaitSecs* )

Definition at line 4313 of file `tempassembled.f90`.

3.27.2.203 subroutine `nwtc_io::waittime` ( real(*reki*), intent(in) *WaitSecs* )

Definition at line 18183 of file `tempassembled.f90`.

3.27.2.204 subroutine `nwtc_io::waittime` ( real(*reki*), intent(in) *WaitSecs* )

Definition at line 32053 of file `tempassembled.f90`.

3.27.2.205 subroutine `nwtc_io::wrfilenr` ( integer, intent(in) *Unit*, character(\*), intent(in) *Str* )

Definition at line 32110 of file `tempassembled.f90`.

3.27.2.206 subroutine `nwtc_io::wrfilenr` ( integer, intent(in) *Unit*, character(\*), intent(in) *Str* )

Definition at line 4370 of file `tempassembled.f90`.

3.27.2.207 subroutine `nwtc_io::wrfilenr` ( integer, intent(in) *Unit*, character(\*), intent(in) *Str* )

Definition at line 18240 of file `tempassembled.f90`.

3.27.2.208 subroutine `nwtc_io::wrml` ( character(\*) *Str* )

Definition at line 32130 of file `tempassembled.f90`.



Here is the call graph for this function:



#### 3.27.2.209 subroutine `nwtc_io::wrml ( character(*) Str )`

Definition at line 18260 of file `tempassembled.f90`.

Here is the call graph for this function:



#### 3.27.2.210 subroutine `nwtc_io::wrml ( character(*) Str )`

Definition at line 4390 of file `tempassembled.f90`.

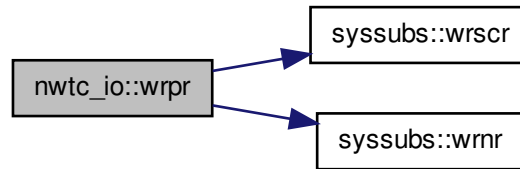
Here is the call graph for this function:



#### 3.27.2.211 subroutine `nwtc_io::wrpr ( character(*), intent(in) Str )`

Definition at line 4350 of file `tempassembled.f90`.

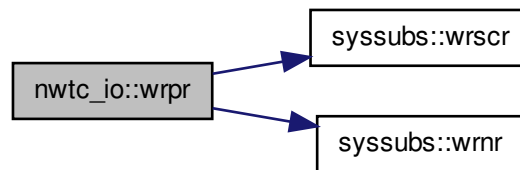
Here is the call graph for this function:



#### 3.27.2.212 subroutine `nwtc_io::wrpr` ( `character(*)`, `intent(in) Str` )

Definition at line 18220 of file `tempassembled.f90`.

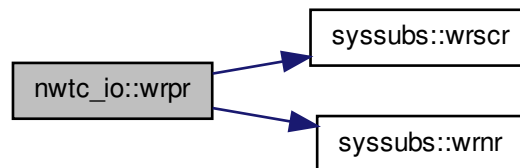
Here is the call graph for this function:



#### 3.27.2.213 subroutine `nwtc_io::wrpr` ( `character(*)`, `intent(in) Str` )

Definition at line 32090 of file `tempassembled.f90`.

Here is the call graph for this function:



**3.27.2.214** subroutine nwtc\_io::wrscr1 ( character(\*) *Str* )

Definition at line 18278 of file tempassembled.f90.

Here is the call graph for this function:

**3.27.2.215** subroutine nwtc\_io::wrscr1 ( character(\*) *Str* )

Definition at line 32148 of file tempassembled.f90.

Here is the call graph for this function:

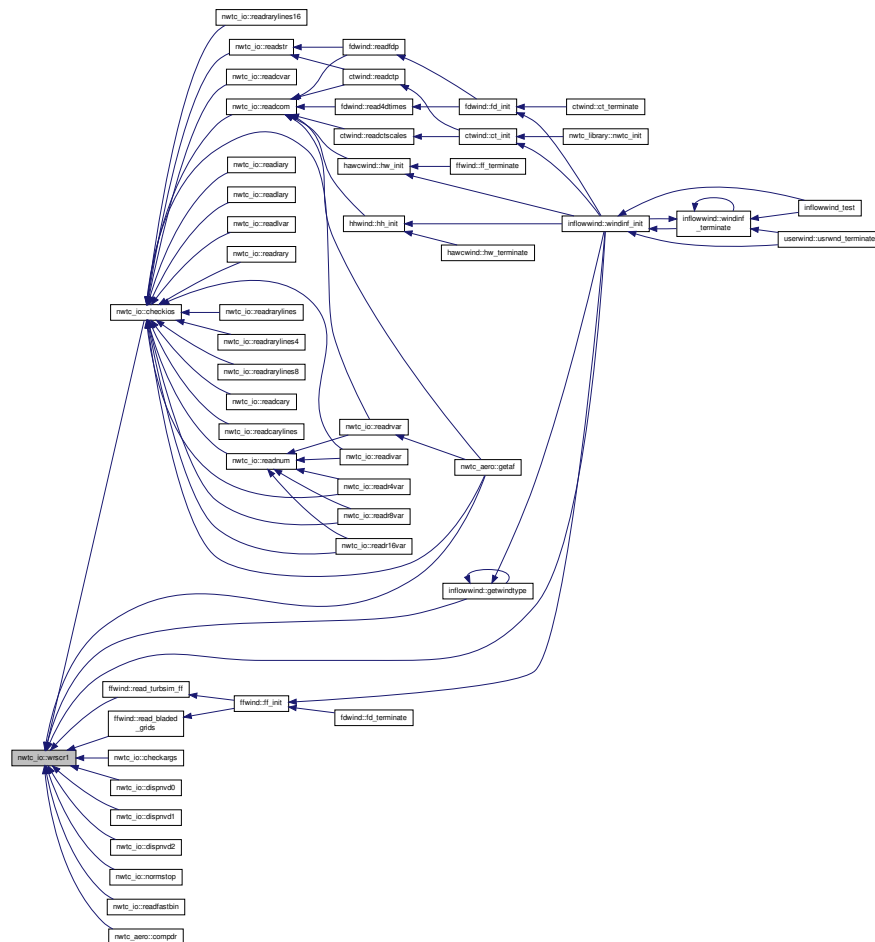
**3.27.2.216** subroutine nwtc\_io::wrscr1 ( character(\*) *Str* )

Definition at line 4408 of file tempassembled.f90.

Here is the call graph for this function:



Here is the caller graph for this function:



3.27.3.5 integer(intki), parameter nwtc\_io::errid\_info = 1

Definition at line 1016 of file tempassembled.f90.

3.27.3.6 integer(intki), parameter nwtc\_io::errid\_none = 0

Definition at line 1015 of file tempassembled.f90.

3.27.3.7 integer(intki), parameter nwtc\_io::errid\_severe = 3

Definition at line 1018 of file tempassembled.f90.

3.27.3.8 integer(intki), parameter nwtc\_io::errid\_warn = 2

Definition at line 1017 of file tempassembled.f90.

3.27.3.9 integer(intki), parameter nwtc\_io::flgtype = 1

Definition at line 1025 of file tempassembled.f90.

3.27.3.10 integer(intki), parameter nwtc\_io::numtype = 2

Definition at line 1026 of file tempassembled.f90.

3.27.3.11 type(progdesc), parameter nwtc\_io::nwtc\_ver = ProgDesc( 'NWTC Subroutine Library', 'v1.06.00b-bjj', '07-Dec-2012')

Definition at line 1033 of file tempassembled.f90.

3.27.3.12 character(20) nwtc\_io::progname = ''

Definition at line 1034 of file tempassembled.f90.

3.27.3.13 character(99) nwtc\_io::progver

Definition at line 1035 of file tempassembled.f90.

3.27.3.14 integer(intki), parameter nwtc\_io::strtype = 3

Definition at line 1027 of file tempassembled.f90.

3.27.3.15 character(1), parameter nwtc\_io::tab = CHAR(9)

Definition at line 1036 of file tempassembled.f90.

3.27.3.16 integer nwtc\_io::unec = 19

Definition at line 1028 of file tempassembled.f90.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

## 3.28 nwtc\_library Module Reference

### Public Member Functions

- subroutine [nwtc\\_init](#) (ProgNameIn, ProgVerIn)

- Generated on Mon Dec 10 2012 16:25:18 for Wave by Doxygen

Definition at line 21011 of file tempassembled.f90.

[illegible]

- tempassembled.f90

## Data Types

- interface `equalrealnos`
- interface `interpbin`
- interface `interpstp`

## Public Member Functions

- subroutine [addorsub2pi](#) (OldAngle, NewAngle)
- subroutine [bsortreal](#) (RealAry, NumPts)
- real(reki) function, dimension(3) [cross\\_product](#) (Vector1, Vector2)
- logical function [equalrealnos4](#) (ReNum1, ReNum2)
- logical function [equalrealnos8](#) (ReNum1, ReNum2)
- logical function [equalrealnos16](#) (ReNum1, ReNum2)
- real(reki) function, dimension(3) [getsmllrotangs](#) (DCMat, ErrStat)
- subroutine [gl\\_pts](#) (IPt, NPts, Loc, Wt, ErrStat)
- integer function [indexcharary](#) (CVal, CAry)
- complex(reki) function [interpbincomp](#) (XVal, XAry, YAry, ILo, AryLen)
- real(reki) function [interpbinreal](#) (XVal, XAry, YAry, ILo, AryLen)
- complex(reki) function [interpstpcomp](#) (XVal, XAry, YAry, Ind, AryLen)
- real(reki) function [interpstpreal](#) (XVal, XAry, YAry, Ind, AryLen)
- subroutine [locatebin](#) (XVal, XAry, Ind, AryLen)
- subroutine [locatestp](#) (XVal, XAry, Ind, AryLen)
- real(reki) function [mean](#) (Ary, AryLen)
- subroutine [mpi2pi](#) (Angle)
- subroutine [rombergint](#) (f, a, b, R, err, eps, ErrStat)
- subroutine [setconstants](#) ()
- subroutine [smllrottrans](#) (RotationType, Theta1, Theta2, Theta3, TransMat, ErrTxt)
- subroutine [sortunion](#) (Ary1, N1, Ary2, N2, Ary, N)
- real(reki) function [stddevfn](#) (Ary, AryLen, Mean)
- subroutine [addorsub2pi](#) (OldAngle, NewAngle)
- subroutine [bsortreal](#) (RealAry, NumPts)
- real(reki) function, dimension(3) [cross\\_product](#) (Vector1, Vector2)
- logical function [equalrealnos4](#) (ReNum1, ReNum2)
- logical function [equalrealnos8](#) (ReNum1, ReNum2)
- logical function [equalrealnos16](#) (ReNum1, ReNum2)
- real(reki) function, dimension(3) [getsmllrotangs](#) (DCMat, ErrStat)
- subroutine [gl\\_pts](#) (IPt, NPts, Loc, Wt, ErrStat)
- integer function [indexcharary](#) (CVal, CAry)
- complex(reki) function [interpbincomp](#) (XVal, XAry, YAry, ILo, AryLen)
- real(reki) function [interpbinreal](#) (XVal, XAry, YAry, ILo, AryLen)
- complex(reki) function [interpstpcomp](#) (XVal, XAry, YAry, Ind, AryLen)
- real(reki) function [interpstpreal](#) (XVal, XAry, YAry, Ind, AryLen)
- subroutine [locatebin](#) (XVal, XAry, Ind, AryLen)
- subroutine [locatestp](#) (XVal, XAry, Ind, AryLen)
- real(reki) function [mean](#) (Ary, AryLen)
- subroutine [mpi2pi](#) (Angle)
- subroutine [rombergint](#) (f, a, b, R, err, eps, ErrStat)
- subroutine [setconstants](#) ()
- subroutine [smllrottrans](#) (RotationType, Theta1, Theta2, Theta3, TransMat, ErrTxt)
- subroutine [sortunion](#) (Ary1, N1, Ary2, N2, Ary, N)
- real(reki) function [stddevfn](#) (Ary, AryLen, Mean)
- subroutine [addorsub2pi](#) (OldAngle, NewAngle)
- subroutine [bsortreal](#) (RealAry, NumPts)
- real(reki) function, dimension(3) [cross\\_product](#) (Vector1, Vector2)
- logical function [equalrealnos4](#) (ReNum1, ReNum2)
- logical function [equalrealnos8](#) (ReNum1, ReNum2)



- logical function [equalrealnos16](#) (ReNum1, ReNum2)
- real(reki) function, dimension(3) [getsmallrotangs](#) (DCMat, ErrStat)
- subroutine [gl\\_pts](#) (IPt, NPts, Loc, Wt, ErrStat)
- integer function [indexcharary](#) (CVal, CAry)
- complex(reki) function [interpbincomp](#) (XVal, XAry, YAry, ILo, AryLen)
- real(reki) function [interpbinreal](#) (XVal, XAry, YAry, ILo, AryLen)
- complex(reki) function [interpstpcomp](#) (XVal, XAry, YAry, Ind, AryLen)
- real(reki) function [interpstpreal](#) (XVal, XAry, YAry, Ind, AryLen)
- subroutine [locatebin](#) (XVal, XAry, Ind, AryLen)
- subroutine [locatestp](#) (XVal, XAry, Ind, AryLen)
- real(reki) function [mean](#) (Ary, AryLen)
- subroutine [mpi2pi](#) (Angle)
- subroutine [rombergint](#) (f, a, b, R, err, eps, ErrStat)
- subroutine [setconstants](#) ()
- subroutine [smallrottrans](#) (RotationType, Theta1, Theta2, Theta3, TransMat, ErrTxt)
- subroutine [sortunion](#) (Ary1, N1, Ary2, N2, Ary, N)
- real(reki) function [stddevfn](#) (Ary, AryLen, Mean)

#### Public Attributes

- real(dbki) [d2r\\_d](#)
- real(dbki) [inf\\_d](#)
- real(dbki) [nan\\_d](#)
- real(dbki) [pi\\_d](#)
- real(dbki) [pi2\\_d](#)
- real(dbki) [r2d\\_d](#)
- real(dbki) [rpm2rps\\_d](#)
- real(dbki) [rps2rpm\\_d](#)
- real(dbki) [twobypi\\_d](#)
- real(dbki) [twopi\\_d](#)
- real(reki) [d2r](#)
- real(reki) [inf](#)
- real(reki) [nan](#)
- real(reki) [pi](#)
- real(reki) [pi2](#)
- real(reki) [r2d](#)
- real(reki) [rpm2rps](#)
- real(reki) [rps2rpm](#)
- real(reki) [twobypi](#)
- real(reki) [twopi](#)
- integer, dimension(:, :), allocatable [intindx](#)

#### 3.29.1 Detailed Description

Definition at line 4429 of file tempassembled.f90.

## 3.29.2 Member Function/Subroutine Documentation

3.29.2.1 subroutine `nwtc_num::addorsub2pi` ( `real(reki)`, `intent(inout)` *OldAngle*, `real(reki)`, `intent(inout)` *NewAngle* )

Definition at line 4524 of file `tempassembled.f90`.

3.29.2.2 subroutine `nwtc_num::addorsub2pi` ( `real(reki)`, `intent(inout)` *OldAngle*, `real(reki)`, `intent(inout)` *NewAngle* )

Definition at line 18394 of file `tempassembled.f90`.

3.29.2.3 subroutine `nwtc_num::addorsub2pi` ( `real(reki)`, `intent(inout)` *OldAngle*, `real(reki)`, `intent(inout)` *NewAngle* )

Definition at line 32264 of file `tempassembled.f90`.

3.29.2.4 subroutine `nwtc_num::bsortreal` ( `real(reki)`, `dimension(numpts)`, `intent(inout)` *RealAry*, `integer`, `intent(in)` *NumPts* )

Definition at line 4574 of file `tempassembled.f90`.

3.29.2.5 subroutine `nwtc_num::bsortreal` ( `real(reki)`, `dimension(numpts)`, `intent(inout)` *RealAry*, `integer`, `intent(in)` *NumPts* )

Definition at line 32314 of file `tempassembled.f90`.

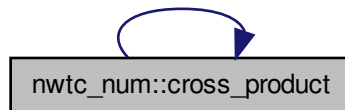
3.29.2.6 subroutine `nwtc_num::bsortreal` ( `real(reki)`, `dimension(numpts)`, `intent(inout)` *RealAry*, `integer`, `intent(in)` *NumPts* )

Definition at line 18444 of file `tempassembled.f90`.

3.29.2.7 `real(reki)` function, `dimension (3)` `nwtc_num::cross_product` ( `real(reki)`, `dimension (3)`, `intent(in)` *Vector1*, `real(reki)`, `dimension (3)`, `intent(in)` *Vector2* )

Definition at line 32360 of file `tempassembled.f90`.

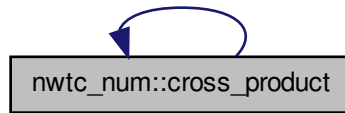
Here is the call graph for this function:



3.29.2.8 `real(reki)` function, `dimension (3)` `nwtc_num::cross_product` ( `real(reki)`, `dimension (3)`, `intent(in)` *Vector1*, `real(reki)`, `dimension (3)`, `intent(in)` *Vector2* )

Definition at line 4620 of file `tempassembled.f90`.

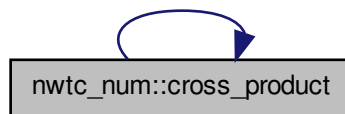
Here is the caller graph for this function:



3.29.2.9 `real(reki)` function, dimension (3) `nwtc_num::cross_product ( real(reki), dimension (3), intent(in) Vector1, real(reki), dimension (3), intent(in) Vector2 )`

Definition at line 18490 of file `tempassembled.f90`.

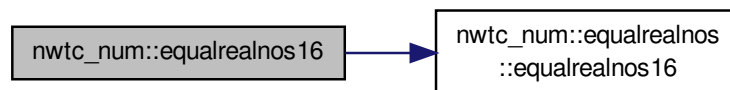
Here is the call graph for this function:



3.29.2.10 logical function `nwtc_num::equalrealnos16 ( real(quki), intent(in) ReNum1, real(quki), intent(in) ReNum2 )`

Definition at line 4764 of file `tempassembled.f90`.

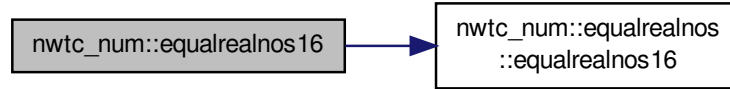
Here is the call graph for this function:



3.29.2.11 logical function `nwtc_num::equalrealnos16 ( real(quki), intent(in) ReNum1, real(quki), intent(in) ReNum2 )`

Definition at line 32504 of file `tempassembled.f90`.

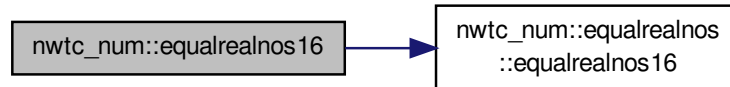
Here is the call graph for this function:



3.29.2.12 logical function `nwtc_num::equalrealnos16 ( real(quki), intent(in) ReNum1, real(quki), intent(in) ReNum2 )`

Definition at line 18634 of file `tempassembled.f90`.

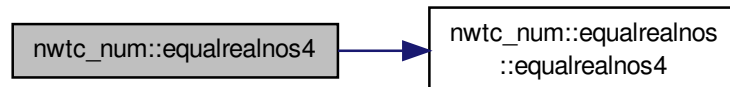
Here is the call graph for this function:



3.29.2.13 logical function `nwtc_num::equalrealnos4 ( real(siki), intent(in) ReNum1, real(siki), intent(in) ReNum2 )`

Definition at line 4690 of file `tempassembled.f90`.

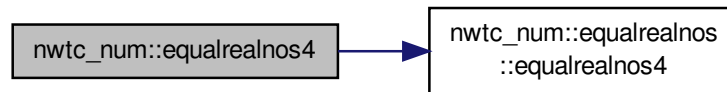
Here is the call graph for this function:



3.29.2.14 logical function `nwtc_num::equalrealnos4 ( real(siki), intent(in) ReNum1, real(siki), intent(in) ReNum2 )`

Definition at line 32430 of file `tempassembled.f90`.

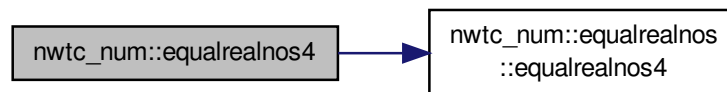
Here is the call graph for this function:



3.29.2.15 logical function `nwtc_num::equalrealnos4 ( real(siki), intent(in) ReNum1, real(siki), intent(in) ReNum2 )`

Definition at line 18560 of file `tempassembled.f90`.

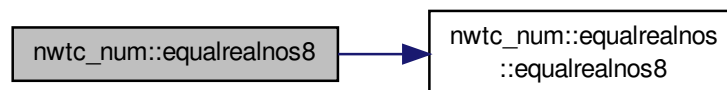
Here is the call graph for this function:



3.29.2.16 logical function `nwtc_num::equalrealnos8 ( real(r8ki), intent(in) ReNum1, real(r8ki), intent(in) ReNum2 )`

Definition at line 4727 of file `tempassembled.f90`.

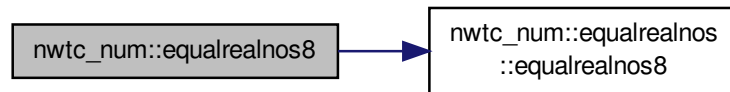
Here is the call graph for this function:



3.29.2.17 logical function `nwtc_num::equalrealnos8 ( real(r8ki), intent(in) ReNum1, real(r8ki), intent(in) ReNum2 )`

Definition at line 32467 of file `tempassembled.f90`.

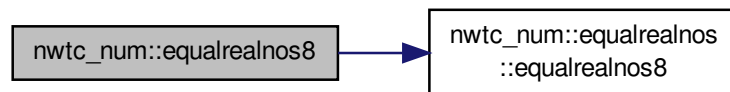
Here is the call graph for this function:



3.29.2.18 logical function `nwtc_num::equalrealnos8 ( real(r8ki), intent(in) ReNum1, real(r8ki), intent(in) ReNum2 )`

Definition at line 18597 of file `tempassembled.f90`.

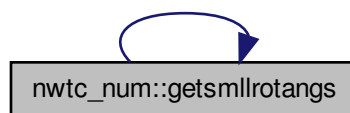
Here is the call graph for this function:



3.29.2.19 `real(reki) function, dimension ( 3 ) nwtc_num::getsmllrotangs ( real(reki), dimension (3,3), intent(in) DCMat, integer, intent(out) ErrStat )`

Definition at line 32541 of file `tempassembled.f90`.

Here is the call graph for this function:



3.29.2.20 `real(reki) function, dimension ( 3 ) nwtc_num::getsmllrotangs ( real(reki), dimension (3,3), intent(in) DCMat, integer, intent(out) ErrStat )`

Definition at line 4801 of file `tempassembled.f90`.

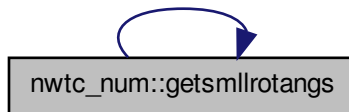
Here is the caller graph for this function:



3.29.2.21 `real(reki) function, dimension ( 3 ) nwtc_num::getsmllrotangs ( real(reki), dimension (3,3), intent(in) DCMat, integer, intent(out) ErrStat )`

Definition at line 18671 of file `tempassembled.f90`.

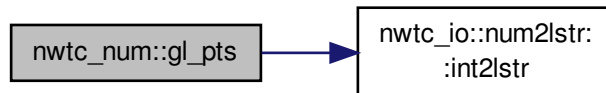
Here is the call graph for this function:



3.29.2.22 `subroutine nwtc_num::gl_pts ( integer, intent(inout) IPt, integer, intent(inout) NPts, real(reki) Loc, real(reki) Wt, integer, intent(out), optional ErrStat )`

Definition at line 4852 of file `tempassembled.f90`.

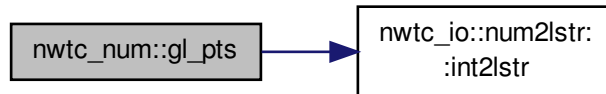
Here is the call graph for this function:



3.29.2.23 subroutine `nwtc_num::gl_pts` ( integer, intent(inout) *IPt*, integer, intent(inout) *NPts*, real(reki) *Loc*, real(reki) *Wt*, integer, intent(out), optional *ErrStat* )

Definition at line 32592 of file `tempassembled.f90`.

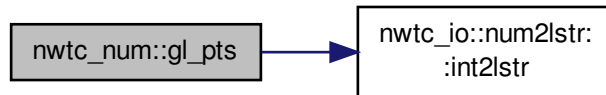
Here is the call graph for this function:



3.29.2.24 subroutine `nwtc_num::gl_pts` ( integer, intent(inout) *IPt*, integer, intent(inout) *NPts*, real(reki) *Loc*, real(reki) *Wt*, integer, intent(out), optional *ErrStat* )

Definition at line 18722 of file `tempassembled.f90`.

Here is the call graph for this function:



3.29.2.25 integer function `nwtc_num::indexcharary` ( character(\*), intent(in) *CVal*, character(\*), dimension(:), intent(in) *CAry* )

Definition at line 4978 of file `tempassembled.f90`.

Here is the caller graph for this function:





3.29.2.26 integer function nwtc\_num::indexcharary ( character(\*), intent(in) CVal, character(\*), dimension(:), intent(in) CAry )

Definition at line 32718 of file tempassembled.f90.

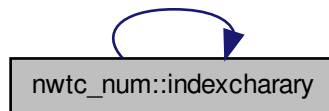
Here is the call graph for this function:



3.29.2.27 integer function nwtc\_num::indexcharary ( character(\*), intent(in) CVal, character(\*), dimension(:), intent(in) CAry )

Definition at line 18848 of file tempassembled.f90.

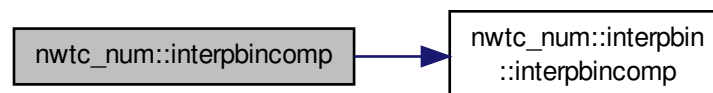
Here is the call graph for this function:



3.29.2.28 complex(reki) function nwtc\_num::interpbincomp ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, complex(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) ILo, integer, intent(in) AryLen )

Definition at line 18916 of file tempassembled.f90.

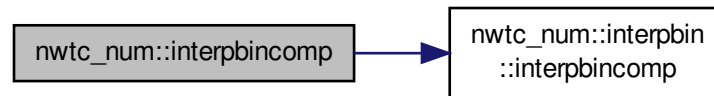
Here is the call graph for this function:



3.29.2.29 `complex(reki) function nwtc_num::interpbincomp ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, complex(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) ILo, integer, intent(in) AryLen )`

Definition at line 5046 of file tempassembled.f90.

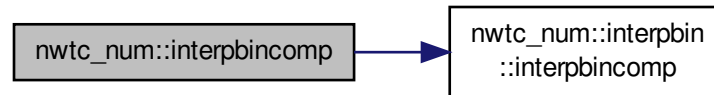
Here is the call graph for this function:



3.29.2.30 `complex(reki) function nwtc_num::interpbincomp ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, complex(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) ILo, integer, intent(in) AryLen )`

Definition at line 32786 of file tempassembled.f90.

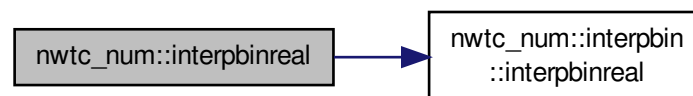
Here is the call graph for this function:



3.29.2.31 `real(reki) function nwtc_num::interpbinreal ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, real(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) ILo, integer, intent(in) AryLen )`

Definition at line 18985 of file tempassembled.f90.

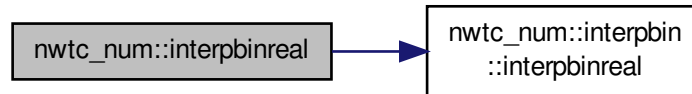
Here is the call graph for this function:



3.29.2.32 `real(reki) function nwtc_num::interpbinreal ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, real(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) ILo, integer, intent(in) AryLen )`

Definition at line 32855 of file tempassembled.f90.

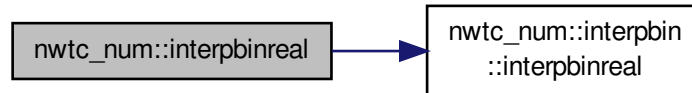
Here is the call graph for this function:



3.29.2.33 `real(reki) function nwtc_num::interpbinreal ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, real(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) ILo, integer, intent(in) AryLen )`

Definition at line 5115 of file tempassembled.f90.

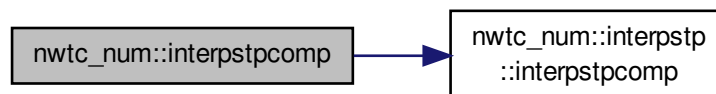
Here is the call graph for this function:



3.29.2.34 `complex(reki) function nwtc_num::interpstpcomp ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, complex(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) Ind, integer, intent(in) AryLen )`

Definition at line 19053 of file tempassembled.f90.

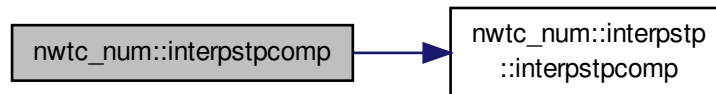
Here is the call graph for this function:



3.29.2.35 `complex(reki) function nwtc_num::interpstpcomp ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, complex(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) Ind, integer, intent(in) AryLen )`

Definition at line 5183 of file tempassembled.f90.

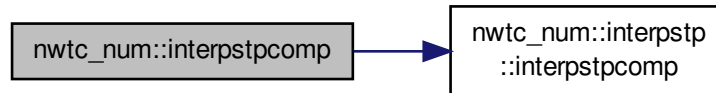
Here is the call graph for this function:



3.29.2.36 `complex(reki) function nwtc_num::interpstpcomp ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, complex(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) Ind, integer, intent(in) AryLen )`

Definition at line 32923 of file tempassembled.f90.

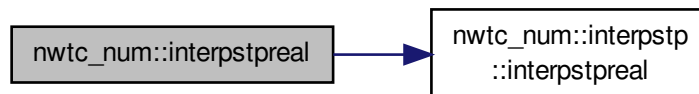
Here is the call graph for this function:



3.29.2.37 `real(reki) function nwtc_num::interpstpreal ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, real(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) Ind, integer, intent(in) AryLen )`

Definition at line 19123 of file tempassembled.f90.

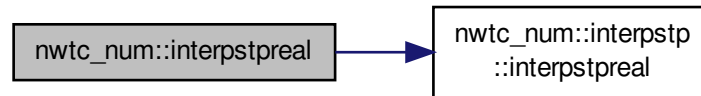
Here is the call graph for this function:



3.29.2.38 `real(reki) function nwtc_num::interpstpreal ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, real(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) Ind, integer, intent(in) AryLen )`

Definition at line 5253 of file tempassembled.f90.

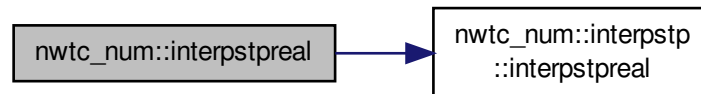
Here is the call graph for this function:



3.29.2.39 `real(reki) function nwtc_num::interpstpreal ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, real(reki), dimension (arylen), intent(in) YAry, integer, intent(inout) Ind, integer, intent(in) AryLen )`

Definition at line 32993 of file tempassembled.f90.

Here is the call graph for this function:



3.29.2.40 `subroutine nwtc_num::locatebin ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, integer, intent(out) Ind, integer, intent(in) AryLen )`

Definition at line 19191 of file tempassembled.f90.

3.29.2.41 `subroutine nwtc_num::locatebin ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, integer, intent(out) Ind, integer, intent(in) AryLen )`

Definition at line 33061 of file tempassembled.f90.

3.29.2.42 `subroutine nwtc_num::locatebin ( real(reki), intent(in) XVal, real(reki), dimension (arylen), intent(in) XAry, integer, intent(out) Ind, integer, intent(in) AryLen )`

Definition at line 5321 of file tempassembled.f90.

3.29.2.43 subroutine nwtc\_num::locatestp ( real(reki), intent(in) *XVal*, real(reki), dimension (arylen), intent(in) *XAry*, integer, intent(inout) *Ind*, integer, intent(in) *AryLen* )

Definition at line 19248 of file tempassembled.f90.

3.29.2.44 subroutine nwtc\_num::locatestp ( real(reki), intent(in) *XVal*, real(reki), dimension (arylen), intent(in) *XAry*, integer, intent(inout) *Ind*, integer, intent(in) *AryLen* )

Definition at line 33118 of file tempassembled.f90.

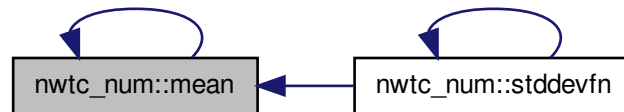
3.29.2.45 subroutine nwtc\_num::locatestp ( real(reki), intent(in) *XVal*, real(reki), dimension (arylen), intent(in) *XAry*, integer, intent(inout) *Ind*, integer, intent(in) *AryLen* )

Definition at line 5378 of file tempassembled.f90.

3.29.2.46 real(reki) function nwtc\_num::mean ( real(reki), dimension (arylen), intent(in) *Ary*, integer, intent(in) *AryLen* )

Definition at line 5438 of file tempassembled.f90.

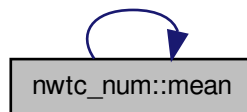
Here is the caller graph for this function:



3.29.2.47 real(reki) function nwtc\_num::mean ( real(reki), dimension (arylen), intent(in) *Ary*, integer, intent(in) *AryLen* )

Definition at line 33178 of file tempassembled.f90.

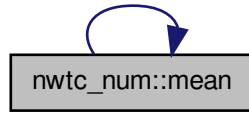
Here is the call graph for this function:



3.29.2.48 real(reki) function nwtc\_num::mean ( real(reki), dimension (arylen), intent(in) *Ary*, integer, intent(in) *AryLen* )

Definition at line 19308 of file tempassembled.f90.

Here is the call graph for this function:



3.29.2.49 subroutine `nwtc_num::mpi2pi` ( `real(reki)`, `intent(inout) Angle` )

Definition at line 33214 of file `tempassembled.f90`.

3.29.2.50 subroutine `nwtc_num::mpi2pi` ( `real(reki)`, `intent(inout) Angle` )

Definition at line 19344 of file `tempassembled.f90`.

3.29.2.51 subroutine `nwtc_num::mpi2pi` ( `real(reki)`, `intent(inout) Angle` )

Definition at line 5474 of file `tempassembled.f90`.

3.29.2.52 subroutine `nwtc_num::rombergint` ( `real(reki)`, `external f`, `real(reki)`, `intent(in) a`, `real(reki)`, `intent(in) b`, `real(reki)`, `intent(out) R`, `real(reki)`, `intent(out) err`, `real(reki)`, `intent(in) eps`, `integer`, `intent(out)`, optional `ErrStat` )

Definition at line 19371 of file `tempassembled.f90`.

3.29.2.53 subroutine `nwtc_num::rombergint` ( `real(reki)`, `external f`, `real(reki)`, `intent(in) a`, `real(reki)`, `intent(in) b`, `real(reki)`, `intent(out) R`, `real(reki)`, `intent(out) err`, `real(reki)`, `intent(in) eps`, `integer`, `intent(out)`, optional `ErrStat` )

Definition at line 5501 of file `tempassembled.f90`.

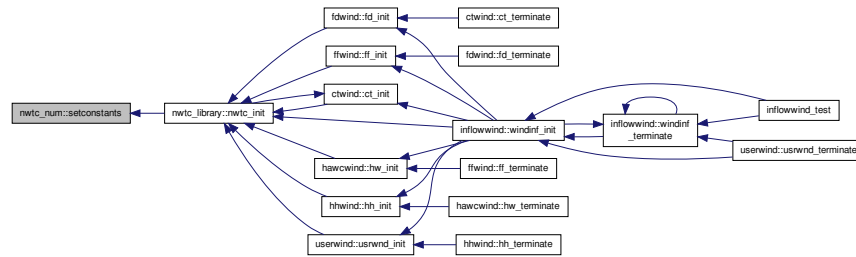
3.29.2.54 subroutine `nwtc_num::rombergint` ( `real(reki)`, `external f`, `real(reki)`, `intent(in) a`, `real(reki)`, `intent(in) b`, `real(reki)`, `intent(out) R`, `real(reki)`, `intent(out) err`, `real(reki)`, `intent(in) eps`, `integer`, `intent(out)`, optional `ErrStat` )

Definition at line 33241 of file `tempassembled.f90`.

3.29.2.55 subroutine `nwtc_num::setconstants` ( )

Definition at line 5599 of file `tempassembled.f90`.

Here is the caller graph for this function:



#### 3.29.2.56 subroutine nwtc\_num::setconstants ( )

Definition at line 33339 of file tempassembled.f90.

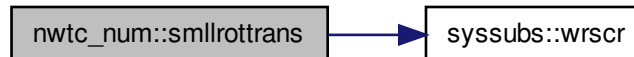
#### 3.29.2.57 subroutine nwtc\_num::setconstants ( )

Definition at line 19469 of file tempassembled.f90.

#### 3.29.2.58 subroutine nwtc\_num::smllrottrans ( character(\*), intent(in) *RotationType*, real(reki), intent(in) *Theta1*, real(reki), intent(in) *Theta2*, real(reki), intent(in) *Theta3*, real(reki), dimension (3,3), intent(out) *TransMat*, character(\*), intent(in), optional *ErrTxt* )

Definition at line 19523 of file tempassembled.f90.

Here is the call graph for this function:

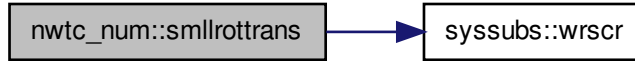


#### 3.29.2.59 subroutine nwtc\_num::smllrottrans ( character(\*), intent(in) *RotationType*, real(reki), intent(in) *Theta1*, real(reki), intent(in) *Theta2*, real(reki), intent(in) *Theta3*, real(reki), dimension (3,3), intent(out) *TransMat*, character(\*), intent(in), optional *ErrTxt* )

Definition at line 33393 of file tempassembled.f90.



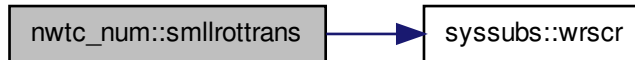
Here is the call graph for this function:



3.29.2.60 subroutine `nwtc_num::smlrottrans` ( `character(*)`, `intent(in) RotationType`, `real(reki)`, `intent(in) Theta1`, `real(reki)`, `intent(in) Theta2`, `real(reki)`, `intent(in) Theta3`, `real(reki)`, `dimension (3,3)`, `intent(out) TransMat`, `character(*)`, `intent(in)`, optional `ErrMsg` )

Definition at line 5653 of file `tempassembled.f90`.

Here is the call graph for this function:



3.29.2.61 subroutine `nwtc_num::sortunion` ( `real(reki)`, `dimension(n1)`, `intent(in) Ary1`, `integer`, `intent(in) N1`, `real(reki)`, `dimension(n2)`, `intent(in) Ary2`, `integer`, `intent(in) N2`, `real(reki)`, `dimension(n1+n2)`, `intent(out) Ary`, `integer`, `intent(out) N` )

Definition at line 5781 of file `tempassembled.f90`.

3.29.2.62 subroutine `nwtc_num::sortunion` ( `real(reki)`, `dimension(n1)`, `intent(in) Ary1`, `integer`, `intent(in) N1`, `real(reki)`, `dimension(n2)`, `intent(in) Ary2`, `integer`, `intent(in) N2`, `real(reki)`, `dimension(n1+n2)`, `intent(out) Ary`, `integer`, `intent(out) N` )

Definition at line 33521 of file `tempassembled.f90`.

3.29.2.63 subroutine `nwtc_num::sortunion` ( `real(reki)`, `dimension(n1)`, `intent(in) Ary1`, `integer`, `intent(in) N1`, `real(reki)`, `dimension(n2)`, `intent(in) Ary2`, `integer`, `intent(in) N2`, `real(reki)`, `dimension(n1+n2)`, `intent(out) Ary`, `integer`, `intent(out) N` )

Definition at line 19651 of file `tempassembled.f90`.

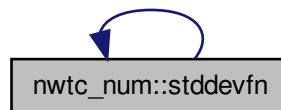
3.29.2.64 `real(reki)` function `nwtc_num::stddevfn` ( `real(reki)`, `dimension (arylen)`, `intent(in) Ary`, `integer`, `intent(in) AryLen`, `real(reki)`, `intent(in) Mean` )

Definition at line 5849 of file `tempassembled.f90`.

Here is the call graph for this function:



Here is the caller graph for this function:



3.29.2.65 `real(reki) function nwtc_num::stddevfn ( real(reki), dimension (arylen), intent(in) Ary, integer, intent(in) AryLen, real(reki), intent(in) Mean )`

Definition at line 33589 of file `tempassembled.f90`.

Here is the call graph for this function:



3.29.2.66 `real(reki) function nwtc_num::stddevfn ( real(reki), dimension (arylen), intent(in) Ary, integer, intent(in) AryLen, real(reki), intent(in) Mean )`

Definition at line 19719 of file `tempassembled.f90`.

Here is the call graph for this function:



### 3.29.3 Member Data Documentation

#### 3.29.3.1 `real(reki) nwtc_num::d2r`

Definition at line 4480 of file `tempassembled.f90`.

#### 3.29.3.2 `real(dbki) nwtc_num::d2r_d`

Definition at line 4468 of file `tempassembled.f90`.

#### 3.29.3.3 `real(reki) nwtc_num::inf`

Definition at line 4481 of file `tempassembled.f90`.

#### 3.29.3.4 `real(dbki) nwtc_num::inf_d`

Definition at line 4469 of file `tempassembled.f90`.

#### 3.29.3.5 `integer, dimension (:,:), allocatable nwtc_num::intindx`

Definition at line 4491 of file `tempassembled.f90`.

#### 3.29.3.6 `real(reki) nwtc_num::nan`

Definition at line 4482 of file `tempassembled.f90`.

#### 3.29.3.7 `real(dbki) nwtc_num::nan_d`

Definition at line 4470 of file `tempassembled.f90`.

#### 3.29.3.8 `real(reki) nwtc_num::pi`

Definition at line 4483 of file `tempassembled.f90`.

#### 3.29.3.9 `real(dbki) nwtc_num::pi_d`

Definition at line 4471 of file `tempassembled.f90`.

#### 3.29.3.10 `real(reki) nwtc_num::piy2`

Definition at line 4484 of file `tempassembled.f90`.

**3.29.3.11** `real(dbki) nwtc_num::piy2_d`

Definition at line 4472 of file tempassembled.f90.

**3.29.3.12** `real(reki) nwtc_num::r2d`

Definition at line 4485 of file tempassembled.f90.

**3.29.3.13** `real(dbki) nwtc_num::r2d_d`

Definition at line 4473 of file tempassembled.f90.

**3.29.3.14** `real(reki) nwtc_num::rpm2rps`

Definition at line 4486 of file tempassembled.f90.

**3.29.3.15** `real(dbki) nwtc_num::rpm2rps_d`

Definition at line 4474 of file tempassembled.f90.

**3.29.3.16** `real(reki) nwtc_num::rps2rpm`

Definition at line 4487 of file tempassembled.f90.

**3.29.3.17** `real(dbki) nwtc_num::rps2rpm_d`

Definition at line 4475 of file tempassembled.f90.

**3.29.3.18** `real(reki) nwtc_num::twobypi`

Definition at line 4488 of file tempassembled.f90.

**3.29.3.19** `real(dbki) nwtc_num::twobypi_d`

Definition at line 4476 of file tempassembled.f90.

**3.29.3.20** `real(reki) nwtc_num::twopi`

Definition at line 4489 of file tempassembled.f90.

**3.29.3.21** `real(dbki) nwtc_num::twopi_d`

Definition at line 4477 of file tempassembled.f90.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

**3.30 precision Module Reference****Public Attributes**

- integer, parameter `b1ki` = `SELECTED_INT_KIND( 2 )`
- integer, parameter `b2ki` = `SELECTED_INT_KIND( 4 )`
- integer, parameter `b4ki` = `SELECTED_INT_KIND( 9 )`
- integer, parameter `b8ki` = `SELECTED_INT_KIND( 18 )`

- integer, parameter `quki` = `SELECTED_REAL_KIND( 20, 500 )`
- integer, parameter `r8ki` = `SELECTED_REAL_KIND( 14, 300 )`
- integer, parameter `siki` = `SELECTED_REAL_KIND( 6, 30 )`
- integer, parameter `intki` = `B4Ki`
- integer, parameter `reki` = `SiKi`
- integer, parameter `dbki` = `R8Ki`
- integer(`intki`), parameter `bytesperreki` = 4
- integer(`intki`), parameter `bytesperdbki` = 8
- integer(`intki`), parameter `bytesperintki` = 4

#### 3.30.1 Detailed Description

Definition at line 77 of file `tempassembled.f90`.

#### 3.30.2 Member Data Documentation

##### 3.30.2.1 integer parameter `precision::b1ki` = `SELECTED_INT_KIND( 2 )`

Definition at line 86 of file `tempassembled.f90`.

##### 3.30.2.2 integer parameter `precision::b2ki` = `SELECTED_INT_KIND( 4 )`

Definition at line 87 of file `tempassembled.f90`.

##### 3.30.2.3 integer parameter `precision::b4ki` = `SELECTED_INT_KIND( 9 )`

Definition at line 88 of file `tempassembled.f90`.

##### 3.30.2.4 integer parameter `precision::b8ki` = `SELECTED_INT_KIND( 18 )`

Definition at line 89 of file `tempassembled.f90`.

##### 3.30.2.5 integer(`intki`), parameter `precision::bytesperdbki` = 8

Definition at line 106 of file `tempassembled.f90`.

##### 3.30.2.6 integer(`intki`), parameter `precision::bytesperintki` = 4

Definition at line 107 of file `tempassembled.f90`.

##### 3.30.2.7 integer(`intki`), parameter `precision::bytesperreki` = 4

Definition at line 105 of file `tempassembled.f90`.

##### 3.30.2.8 integer parameter `precision::dbki` = `R8Ki`

Definition at line 100 of file `tempassembled.f90`.

##### 3.30.2.9 integer parameter `precision::intki` = `B4Ki`

Definition at line 98 of file `tempassembled.f90`.

##### 3.30.2.10 integer parameter `precision::quki` = `SELECTED_REAL_KIND( 20, 500 )`

Definition at line 91 of file `tempassembled.f90`.

#### 3.30.2.11 integer parameter precision::r8ki = SELECTED\_REAL\_KIND( 14, 300 )

Definition at line 92 of file tempassembled.f90.

#### 3.30.2.12 integer parameter precision::reki = SiKi

Definition at line 99 of file tempassembled.f90.

#### 3.30.2.13 integer parameter precision::siki = SELECTED\_REAL\_KIND( 6, 30 )

Definition at line 93 of file tempassembled.f90.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

### 3.31 nwtc\_io::progdsc Type Reference

#### Public Attributes

- character(24) [name](#)
- character(99) [ver](#)
- character(24) [date](#)

#### 3.31.1 Detailed Description

Definition at line 998 of file tempassembled.f90.

#### 3.31.2 Member Data Documentation

##### 3.31.2.1 character(24) nwtc\_io::progdsc::date

Definition at line 1001 of file tempassembled.f90.

##### 3.31.2.2 character(24) nwtc\_io::progdsc::name

Definition at line 999 of file tempassembled.f90.

##### 3.31.2.3 character(99) nwtc\_io::progdsc::ver

Definition at line 1000 of file tempassembled.f90.

The documentation for this type was generated from the following file:

- [tempassembled.f90](#)

### 3.32 nwtc\_io::readary Interface Reference

#### Public Member Functions

- subroutine [readcary](#) (UnIn, Fil, CharAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readiary](#) (UnIn, Fil, IntAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readlary](#) (UnIn, Fil, LogAry, AryLen, AryName, AryDescr, ErrStat)

- subroutine [readary](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readcary](#) (UnIn, Fil, CharAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readiary](#) (UnIn, Fil, IntAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readlary](#) (UnIn, Fil, LogAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readary](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readcary](#) (UnIn, Fil, CharAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readiary](#) (UnIn, Fil, IntAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readlary](#) (UnIn, Fil, LogAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readary](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)

### 3.32.1 Detailed Description

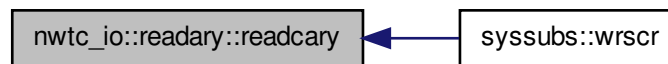
Definition at line 1077 of file tempassembled.f90.

### 3.32.2 Member Function/Subroutine Documentation

- 3.32.2.1 subroutine nwtc\_io::readary::readcary ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(arylen), intent(out) *CharAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 2999 of file tempassembled.f90.

Here is the caller graph for this function:



- 3.32.2.2 subroutine nwtc\_io::readary::readcary ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(arylen), intent(out) *CharAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 16869 of file tempassembled.f90.

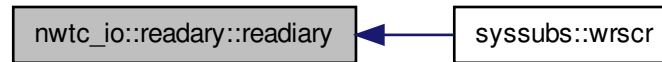
- 3.32.2.3 subroutine nwtc\_io::readary::readcary ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(arylen), intent(out) *CharAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 30739 of file tempassembled.f90.

- 3.32.2.4 subroutine nwtc\_io::readary::readiary ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, integer, dimension(arylen), intent(out) *IntAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3504 of file tempassembled.f90.

Here is the caller graph for this function:



**3.32.2.5** subroutine nwtc\_io::readary::readary ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, integer, dimension(arylen), intent(out) *IntAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31244 of file tempassembled.f90.

**3.32.2.6** subroutine nwtc\_io::readary::readary ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, integer, dimension(arylen), intent(out) *IntAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17374 of file tempassembled.f90.

**3.32.2.7** subroutine nwtc\_io::readary::readlary ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, logical, dimension(arylen), intent(out) *LogAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17470 of file tempassembled.f90.

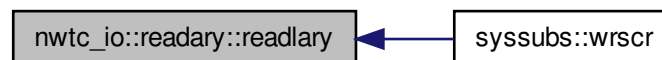
**3.32.2.8** subroutine nwtc\_io::readary::readlary ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, logical, dimension(arylen), intent(out) *LogAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31340 of file tempassembled.f90.

**3.32.2.9** subroutine nwtc\_io::readary::readlary ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, logical, dimension(arylen), intent(out) *LogAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3600 of file tempassembled.f90.

Here is the caller graph for this function:





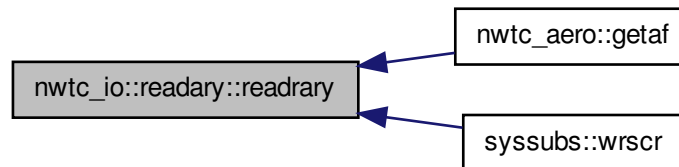
3.32.2.10 subroutine nwtc\_io::readary::readary ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(reki), dimension(arylen), intent(inout) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31570 of file tempassembled.f90.

3.32.2.11 subroutine nwtc\_io::readary::readary ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(reki), dimension(arylen), intent(inout) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3830 of file tempassembled.f90.

Here is the caller graph for this function:



3.32.2.12 subroutine nwtc\_io::readary::readary ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(reki), dimension(arylen), intent(inout) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17700 of file tempassembled.f90.

The documentation for this interface was generated from the following file:

- [tempassembled.f90](#)

### 3.33 nwtc\_io::readarylines Interface Reference

#### Public Member Functions

- subroutine [readcarylines](#) (UnIn, Fil, CharAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readarylines4](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readarylines8](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readarylines16](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readcarylines](#) (UnIn, Fil, CharAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readarylines4](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readarylines8](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readarylines16](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readcarylines](#) (UnIn, Fil, CharAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readarylines4](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readarylines8](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)
- subroutine [readarylines16](#) (UnIn, Fil, RealAry, AryLen, AryName, AryDescr, ErrStat)

## 3.33.1 Detailed Description

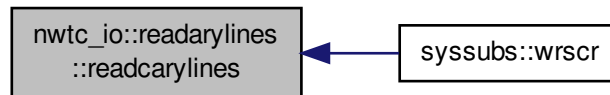
Definition at line 1085 of file tempassembled.f90.

## 3.33.2 Member Function/Subroutine Documentation

3.33.2.1 subroutine nwtc\_io::readarylines::readcarylines ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(arylen), intent(out) *CharAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3043 of file tempassembled.f90.

Here is the caller graph for this function:



3.33.2.2 subroutine nwtc\_io::readarylines::readcarylines ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(arylen), intent(out) *CharAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 16913 of file tempassembled.f90.

3.33.2.3 subroutine nwtc\_io::readarylines::readcarylines ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), dimension(arylen), intent(out) *CharAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 30783 of file tempassembled.f90.

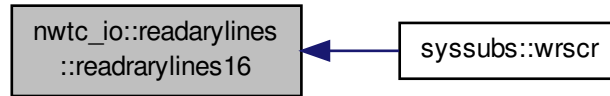
3.33.2.4 subroutine nwtc\_io::readarylines::readrarilylines16 ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(quki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17888 of file tempassembled.f90.

3.33.2.5 subroutine nwtc\_io::readarylines::readrarilylines16 ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(quki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 4018 of file tempassembled.f90.

Here is the caller graph for this function:



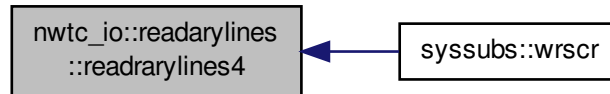
**3.33.2.6** subroutine `nwtc_io::readarylines::readarylines16` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(*quki*), dimension(*arylen*), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31758 of file `tempassembled.f90`.

**3.33.2.7** subroutine `nwtc_io::readarylines::readarylines4` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(*siki*), dimension(*arylen*), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3924 of file `tempassembled.f90`.

Here is the caller graph for this function:



**3.33.2.8** subroutine `nwtc_io::readarylines::readarylines4` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(*siki*), dimension(*arylen*), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31664 of file `tempassembled.f90`.

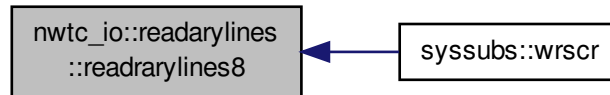
**3.33.2.9** subroutine `nwtc_io::readarylines::readarylines4` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(*siki*), dimension(*arylen*), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17794 of file `tempassembled.f90`.

3.33.2.10 subroutine nwtc\_io::readarylines::readrarilylines8 ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(r8ki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3971 of file tempassembled.f90.

Here is the caller graph for this function:



3.33.2.11 subroutine nwtc\_io::readarylines::readrarilylines8 ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(r8ki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17841 of file tempassembled.f90.

3.33.2.12 subroutine nwtc\_io::readarylines::readrarilylines8 ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, real(r8ki), dimension(arylen), intent(out) *RealAry*, integer, intent(in) *AryLen*, character(\*), intent(in) *AryName*, character(\*), intent(in) *AryDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31711 of file tempassembled.f90.

The documentation for this interface was generated from the following file:

- [tempassembled.f90](#)

## 3.34 nwtc\_io::readvar Interface Reference

### Public Member Functions

- subroutine [readcvar](#) (UnIn, Fil, CharVar, VarName, VarDescr, ErrStat)
- subroutine [readivar](#) (UnIn, Fil, IntVar, VarName, VarDescr, ErrStat)
- subroutine [readlvar](#) (UnIn, Fil, LogVar, VarName, VarDescr, ErrStat)
- subroutine [readr4var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr8var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr16var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readcvar](#) (UnIn, Fil, CharVar, VarName, VarDescr, ErrStat)
- subroutine [readivar](#) (UnIn, Fil, IntVar, VarName, VarDescr, ErrStat)
- subroutine [readlvar](#) (UnIn, Fil, LogVar, VarName, VarDescr, ErrStat)
- subroutine [readr4var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr8var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr16var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readcvar](#) (UnIn, Fil, CharVar, VarName, VarDescr, ErrStat)
- subroutine [readivar](#) (UnIn, Fil, IntVar, VarName, VarDescr, ErrStat)

- subroutine [readlvar](#) (UnIn, Fil, LogVar, VarName, VarDescr, ErrStat)
- subroutine [readr4var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr8var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)
- subroutine [readr16var](#) (UnIn, Fil, RealVar, VarName, VarDescr, ErrStat)

### 3.34.1 Detailed Description

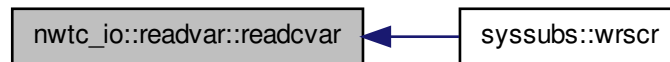
Definition at line 1065 of file tempassembled.f90.

### 3.34.2 Member Function/Subroutine Documentation

**3.34.2.1** subroutine `nwtc_io::readvar::readcvar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), intent(out) *CharVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3129 of file tempassembled.f90.

Here is the caller graph for this function:



**3.34.2.2** subroutine `nwtc_io::readvar::readcvar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), intent(out) *CharVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 16999 of file tempassembled.f90.

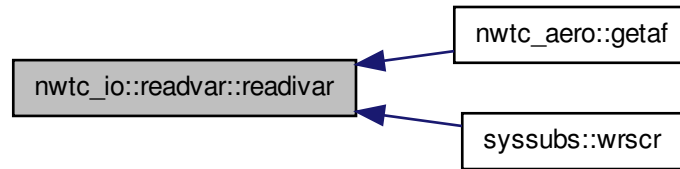
**3.34.2.3** subroutine `nwtc_io::readvar::readcvar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, character(\*), intent(out) *CharVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 30869 of file tempassembled.f90.

**3.34.2.4** subroutine `nwtc_io::readvar::readivar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, integer, intent(out) *IntVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3550 of file tempassembled.f90.

Here is the caller graph for this function:



3.34.2.5 subroutine `nwtc_io::readvar::readivar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, integer, intent(out) *IntVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17420 of file `tempassembled.f90`.

3.34.2.6 subroutine `nwtc_io::readvar::readivar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, integer, intent(out) *IntVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31290 of file `tempassembled.f90`.

3.34.2.7 subroutine `nwtc_io::readvar::readlvar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, logical, intent(out) *LogVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31387 of file `tempassembled.f90`.

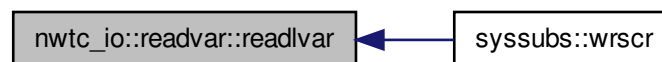
3.34.2.8 subroutine `nwtc_io::readvar::readlvar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, logical, intent(out) *LogVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17517 of file `tempassembled.f90`.

3.34.2.9 subroutine `nwtc_io::readvar::readlvar` ( integer, intent(in) *UnIn*, character(\*), intent(in) *Fil*, logical, intent(out) *LogVar*, character(\*), intent(in) *VarName*, character(\*), intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 3647 of file `tempassembled.f90`.

Here is the caller graph for this function:



3.34.2.10 subroutine nwtc\_io::readvar::readr16var ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(quki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 18089 of file tempassembled.f90.

3.34.2.11 subroutine nwtc\_io::readvar::readr16var ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(quki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 4219 of file tempassembled.f90.

Here is the caller graph for this function:



3.34.2.12 subroutine nwtc\_io::readvar::readr16var ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(quki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31959 of file tempassembled.f90.

3.34.2.13 subroutine nwtc\_io::readvar::readr4var ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(siki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31857 of file tempassembled.f90.

3.34.2.14 subroutine nwtc\_io::readvar::readr4var ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(siki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 4117 of file tempassembled.f90.

Here is the caller graph for this function:



3.34.2.15 subroutine nwtc\_io::readvar::readr4var ( integer, intent(in) *UnIn*, character( \*) , intent(in) *Fil*, real(siki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 17987 of file tempassembled.f90.

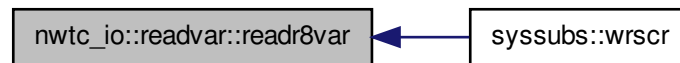
3.34.2.16 subroutine `nwtc_io::readvar::readr8var` ( integer, intent(in) *Unln*, character( \*) , intent(in) *Fil*, real(r8ki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 31908 of file `tempassembled.f90`.

3.34.2.17 subroutine `nwtc_io::readvar::readr8var` ( integer, intent(in) *Unln*, character( \*) , intent(in) *Fil*, real(r8ki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 4168 of file `tempassembled.f90`.

Here is the caller graph for this function:



3.34.2.18 subroutine `nwtc_io::readvar::readr8var` ( integer, intent(in) *Unln*, character( \*) , intent(in) *Fil*, real(r8ki), intent(out) *RealVar*, character( \*) , intent(in) *VarName*, character( \*) , intent(in) *VarDescr*, integer, intent(out), optional *ErrStat* )

Definition at line 18038 of file `tempassembled.f90`.

The documentation for this interface was generated from the following file:

- [tempassembled.f90](#)

## 3.35 sharedinflowdefns Module Reference

### Data Types

- type [inflintrpout](#)

### Public Attributes

- integer, parameter, public [default\\_wind](#) = -1
- integer, parameter, public [undef\\_wind](#) = 0
- integer, parameter, public [hh\\_wind](#) = 1
- integer, parameter, public [ff\\_wind](#) = 2
- integer, parameter, public [ud\\_wind](#) = 3
- integer, parameter, public [fd\\_wind](#) = 4
- integer, parameter, public [ctp\\_wind](#) = 5
- integer, parameter, public [hawc\\_wind](#) = 6

### 3.35.1 Detailed Description

Definition at line 7179 of file `tempassembled.f90`.



## 3.35.2 Member Data Documentation

## 3.35.2.1 integer parameter public sharedinflowdefns::ctp\_wind = 5

Definition at line 7210 of file tempassembled.f90.

## 3.35.2.2 integer parameter public sharedinflowdefns::default\_wind = -1

Definition at line 7204 of file tempassembled.f90.

## 3.35.2.3 integer parameter public sharedinflowdefns::fd\_wind = 4

Definition at line 7209 of file tempassembled.f90.

## 3.35.2.4 integer parameter public sharedinflowdefns::ff\_wind = 2

Definition at line 7207 of file tempassembled.f90.

## 3.35.2.5 integer parameter public sharedinflowdefns::hawc\_wind = 6

Definition at line 7211 of file tempassembled.f90.

## 3.35.2.6 integer parameter public sharedinflowdefns::hh\_wind = 1

Definition at line 7206 of file tempassembled.f90.

## 3.35.2.7 integer parameter public sharedinflowdefns::ud\_wind = 3

Definition at line 7208 of file tempassembled.f90.

## 3.35.2.8 integer parameter public sharedinflowdefns::undef\_wind = 0

Definition at line 7205 of file tempassembled.f90.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

## 3.36 syssubs Module Reference

## Public Member Functions

- subroutine [flushout](#) (Unit)
- subroutine [get\\_arg](#) (Arg\_Num, Arg, Error)
- subroutine [get\\_arg\\_num](#) (Arg\_Num)
- subroutine [get\\_command](#) (Command, Length, Status)
- subroutine [get\\_command\\_argument](#) (Number, Value, Length, Status)
- subroutine [get\\_cwd](#) (DirName, Status)
- character(500) function [get\\_env](#) (EnvVar)
- character(maxlen) function [get\\_environment\\_variable](#) (Name, Value, Length, Status, Trim\_Name)
- logical function [is\\_nan](#) (DblNum)
- subroutine [openbinfile](#) (Un, OutFile, RecLen, Error)
- subroutine [openbininfile](#) (Un, InFile, Error)
- subroutine [opencon](#)
- subroutine [openunfinpbefile](#) (Un, InFile, RecLen, Error)

- subroutine [progexit](#) (StatCode)
- subroutine [usralarm](#)
- subroutine [wnr](#) (Str)
- subroutine [wrover](#) (Str)
- subroutine, dimension() [wrscr](#) (Str)
- subroutine [flushout](#) (Unit)
- subroutine [get\\_arg](#) (Arg\_Num, Arg, Error)
- subroutine [get\\_arg\\_num](#) (Arg\_Num)
- subroutine [get\\_command](#) (Command, Length, Status)
- subroutine [get\\_command\\_argument](#) (Number, Value, Length, Status)
- subroutine [get\\_cwd](#) (DirName, Status)
- character(500) function [get\\_env](#) (EnvVar)
- character(maxlen) function [get\\_environment\\_variable](#) (Name, Value, Length, Status, Trim\_Name)
- logical function [is\\_nan](#) (DblNum)
- subroutine [openbinfile](#) (Un, OutFile, RecLen, Error)
- subroutine [openbininfile](#) (Un, InFile, Error)
- subroutine [opencon](#)
- subroutine [openunfinpbefile](#) (Un, InFile, RecLen, Error)
- subroutine [progexit](#) (StatCode)
- subroutine [usralarm](#)
- subroutine [wnr](#) (Str)
- subroutine [wrover](#) (Str)
- subroutine, dimension() [wrscr](#) (Str)
- subroutine [flushout](#) (Unit)
- subroutine [get\\_arg](#) (Arg\_Num, Arg, Error)
- subroutine [get\\_arg\\_num](#) (Arg\_Num)
- subroutine [get\\_command](#) (Command, Length, Status)
- subroutine [get\\_command\\_argument](#) (Number, Value, Length, Status)
- subroutine [get\\_cwd](#) (DirName, Status)
- character(500) function [get\\_env](#) (EnvVar)
- character(maxlen) function [get\\_environment\\_variable](#) (Name, Value, Length, Status, Trim\_Name)
- logical function [is\\_nan](#) (DblNum)
- subroutine [openbinfile](#) (Un, OutFile, RecLen, Error)
- subroutine [openbininfile](#) (Un, InFile, Error)
- subroutine [opencon](#)
- subroutine [openunfinpbefile](#) (Un, InFile, RecLen, Error)
- subroutine [progexit](#) (StatCode)
- subroutine [usralarm](#)
- subroutine [wnr](#) (Str)
- subroutine [wrover](#) (Str)
- subroutine, dimension() [wrscr](#) (Str)

#### Public Attributes

- integer [conrecl](#) = 120
- integer [cu](#) = 6
- integer [nl\\_len](#) = 2
- character(10) [endian](#) = 'BIG\_ENDIAN'

- character(1) [pathsep](#) = '\' ! The path separator. CHARACTER( 1) :: SwChar = '/' ! The switch character for command-line options. 20110512 jm changed from 'BINARY' to 'UNFORMATTED' because 'BINARY' is not standard and caused problems in OPEN statements in NWTC\_io.f90 that use this definition CHARACTER(11) :: UnfForm = 'UNFORMATTED' ! The string to specify unformatted I/O files. CONTAINS===== FUNCTION COMMAND\_ARGUMENT\_COUNT() ! This routine returns the number of arguments entered on the command line. ! Note: This routine will be available intrinsically in Fortran 2000. ! Function declaration. INTEGER :: COMMAND\_ARGUMENT\_COUNT ! This function. The command line. ! Determine the number of arguments. Load the program name into the result. COMMAND\_ARGUMENT\_COUNT = IArgC() RETURN END FUNCTION COMMAND\_ARGUMENT\_COUNT ! ()!===== SUBROUTINE FileSize ( FileName, Size ) ! This routine calls the routine Stat to obtain the file size ! corresponding to a file name or returns -1 on error. ! mlb: WARNING!!! ! The standard version of the routine uses the file unit instead of file name. ! We need fix the routines that call this one. ! Argument declarations: INTEGER, INTENT(OUT) :: Size CHARACTER(\*), INTENT(IN) :: FileName ! Intrinsic declarations: INTEGER(KIND=1) :: Stat ! Local declarations: INTEGER :: StatArray(12) INTEGER :: Status Status = Stat( FileName, StatArray ) IF ( Status /= 0 ) THEN Size = -1 ELSE Size = StatArray(8) END IF RETURN END SUBROUTINE FileSize ! ( FileName, Size )!===== SUBROUTINE FindLine ( Str , MaxLen , StrEnd ) ! This routine finds one line of text with a maximum length of MaxLen from the Str. ! It tries to break the line at a blank. ! This routine isn't system specific
- character(1) [but](#)
- character(1) [it](#)
- character(1) [is](#)
- character(1) [called](#)
- character(1) [by](#)
- character(1), dimension() [wrscr](#)
- character(1) [which](#)
- character(1) [so](#)
- character(1) [must](#)
- character(1) [be](#)
- character(1) [here](#)
- integer, intent(in) [maxlen](#)
- integer, intent(out) [strend](#)
- character(\*), intent(in) [str](#)
- integer [ic](#)

### 3.36.1 Detailed Description

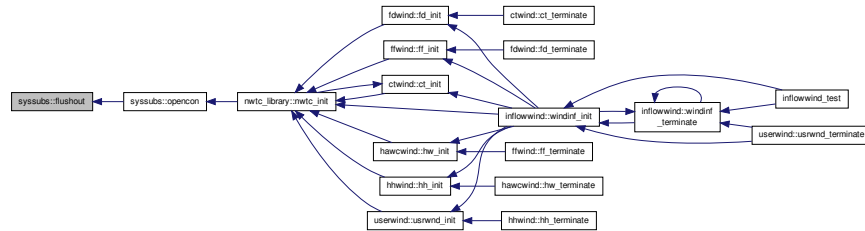
Definition at line 111 of file tempassembled.f90.

### 3.36.2 Member Function/Subroutine Documentation

#### 3.36.2.1 subroutine syssubs::flushout ( integer, intent(in) Unit )

Definition at line 287 of file tempassembled.f90.

Here is the caller graph for this function:



### 3.36.2.2 subroutine syssubs::flushout ( integer, intent(in) Unit )

Definition at line 14157 of file tempassembled.f90.

### 3.36.2.3 subroutine syssubs::flushout ( integer, intent(in) Unit )

Definition at line 28027 of file tempassembled.f90.

### 3.36.2.4 subroutine syssubs::get\_arg ( integer, intent(in) Arg\_Num, character(\*), intent(out) Arg, logical, intent(out) Error )

Definition at line 306 of file tempassembled.f90.

Here is the caller graph for this function:



### 3.36.2.5 subroutine syssubs::get\_arg ( integer, intent(in) Arg\_Num, character(\*), intent(out) Arg, logical, intent(out) Error )

Definition at line 28046 of file tempassembled.f90.

### 3.36.2.6 subroutine syssubs::get\_arg ( integer, intent(in) Arg\_Num, character(\*), intent(out) Arg, logical, intent(out) Error )

Definition at line 14176 of file tempassembled.f90.

### 3.36.2.7 subroutine syssubs::get\_arg\_num ( integer, intent(out) Arg\_Num )

Definition at line 28081 of file tempassembled.f90.

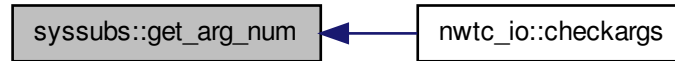
### 3.36.2.8 subroutine syssubs::get\_arg\_num ( integer, intent(out) Arg\_Num )

Definition at line 14211 of file tempassembled.f90.

### 3.36.2.9 subroutine syssubs::get\_arg\_num ( integer, intent(out) *Arg\_Num* )

Definition at line 341 of file tempassembled.f90.

Here is the caller graph for this function:



### 3.36.2.10 subroutine syssubs::get\_command ( character(\*), intent(out), optional *Command*, integer, intent(out), optional *Length*, integer, intent(out), optional *Status* )

Definition at line 361 of file tempassembled.f90.

### 3.36.2.11 subroutine syssubs::get\_command ( character(\*), intent(out), optional *Command*, integer, intent(out), optional *Length*, integer, intent(out), optional *Status* )

Definition at line 28101 of file tempassembled.f90.

### 3.36.2.12 subroutine syssubs::get\_command ( character(\*), intent(out), optional *Command*, integer, intent(out), optional *Length*, integer, intent(out), optional *Status* )

Definition at line 14231 of file tempassembled.f90.

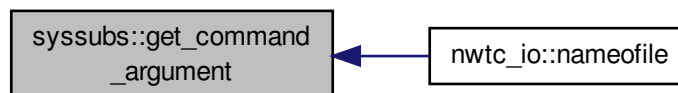
### 3.36.2.13 subroutine syssubs::get\_command\_argument ( integer, intent(in) *Number*, character(\*), intent(out), optional *Value*, integer, intent(out), optional *Length*, integer, intent(out), optional *Status* )

Definition at line 28154 of file tempassembled.f90.

### 3.36.2.14 subroutine syssubs::get\_command\_argument ( integer, intent(in) *Number*, character(\*), intent(out), optional *Value*, integer, intent(out), optional *Length*, integer, intent(out), optional *Status* )

Definition at line 414 of file tempassembled.f90.

Here is the caller graph for this function:



3.36.2.15 subroutine syssubs::get\_command\_argument ( integer, intent(in) *Number*, character(\*), intent(out), optional *Value*, integer, intent(out), optional *Length*, integer, intent(out), optional *Status* )

Definition at line 14284 of file tempassembled.f90.

3.36.2.16 subroutine syssubs::get\_cwd ( character(\*), intent(out) *DirName*, integer, intent(out) *Status* )

Definition at line 28199 of file tempassembled.f90.

3.36.2.17 subroutine syssubs::get\_cwd ( character(\*), intent(out) *DirName*, integer, intent(out) *Status* )

Definition at line 459 of file tempassembled.f90.

3.36.2.18 subroutine syssubs::get\_cwd ( character(\*), intent(out) *DirName*, integer, intent(out) *Status* )

Definition at line 14329 of file tempassembled.f90.

3.36.2.19 character(500) function syssubs::get\_env ( character(\*), intent(in) *EnvVar* )

Definition at line 28219 of file tempassembled.f90.

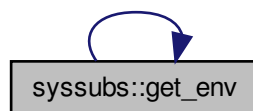
Here is the call graph for this function:



3.36.2.20 character(500) function syssubs::get\_env ( character(\*), intent(in) *EnvVar* )

Definition at line 14349 of file tempassembled.f90.

Here is the call graph for this function:



**3.36.2.21** `character(500)` function `syssubs::get_env` ( `character(*)`, `intent(in) EnvVar` )

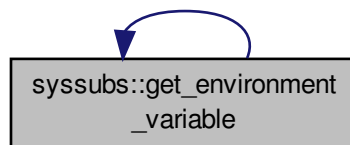
Definition at line 479 of file `tempassembled.f90`.

Here is the caller graph for this function:

**3.36.2.22** `character(maxlen)` function `syssubs::get_environment_variable` ( `character(*)`, `intent(in) Name`, `character(*)`, `intent(out)`, optional `Value`, `integer`, `intent(out)`, optional `Length`, `integer`, `intent(out)`, optional `Status`, `logical`, `intent(in)`, optional `Trim_Name` )

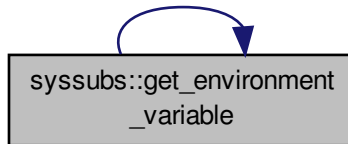
Definition at line 505 of file `tempassembled.f90`.

Here is the caller graph for this function:

**3.36.2.23** `character(maxlen)` function `syssubs::get_environment_variable` ( `character(*)`, `intent(in) Name`, `character(*)`, `intent(out)`, optional `Value`, `integer`, `intent(out)`, optional `Length`, `integer`, `intent(out)`, optional `Status`, `logical`, `intent(in)`, optional `Trim_Name` )

Definition at line 28245 of file `tempassembled.f90`.

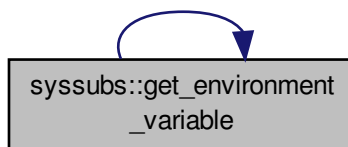
Here is the call graph for this function:



**3.36.2.24** `character(maxlen)` function `syssubs::get_environment_variable` ( `character(*)`, `intent(in)` *Name*, `character(*)`, `intent(out)`, optional *Value*, `integer`, `intent(out)`, optional *Length*, `integer`, `intent(out)`, optional *Status*, `logical`, `intent(in)`, optional *Trim\_Name* )

Definition at line 14375 of file `tempassembled.f90`.

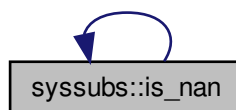
Here is the call graph for this function:



**3.36.2.25** `logical` function `syssubs::is_nan` ( `real(dbki)`, `intent(in)` *DbINum* )

Definition at line 575 of file `tempassembled.f90`.

Here is the caller graph for this function:

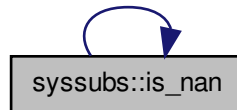




**3.36.2.26** logical function syssubs::is\_nan ( real(dbki), intent(in) *DblNum* )

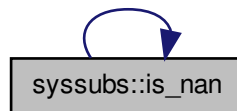
Definition at line 28315 of file tempassembled.f90.

Here is the call graph for this function:

**3.36.2.27** logical function syssubs::is\_nan ( real(dbki), intent(in) *DblNum* )

Definition at line 14445 of file tempassembled.f90.

Here is the call graph for this function:

**3.36.2.28** subroutine syssubs::openbinfile ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(in) *RecLen*, logical, intent(out) *Error* )

Definition at line 602 of file tempassembled.f90.

Here is the caller graph for this function:



3.36.2.29 subroutine syssubs::openbinfile ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(in) *RecLen*, logical, intent(out) *Error* )

Definition at line 28342 of file tempassembled.f90.

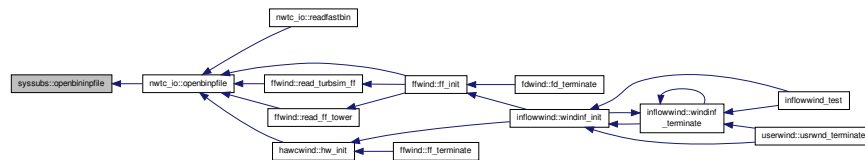
3.36.2.30 subroutine syssubs::openbinfile ( integer, intent(in) *Un*, character(\*), intent(in) *OutFile*, integer, intent(in) *RecLen*, logical, intent(out) *Error* )

Definition at line 14472 of file tempassembled.f90.

3.36.2.31 subroutine syssubs::openbininfile ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, logical, intent(out) *Error* )

Definition at line 639 of file tempassembled.f90.

Here is the caller graph for this function:



3.36.2.32 subroutine syssubs::openbininfile ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, logical, intent(out) *Error* )

Definition at line 28379 of file tempassembled.f90.

3.36.2.33 subroutine syssubs::openbininfile ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, logical, intent(out) *Error* )

Definition at line 14509 of file tempassembled.f90.

3.36.2.34 subroutine syssubs::opencon ( )

Definition at line 28421 of file tempassembled.f90.

Here is the call graph for this function:



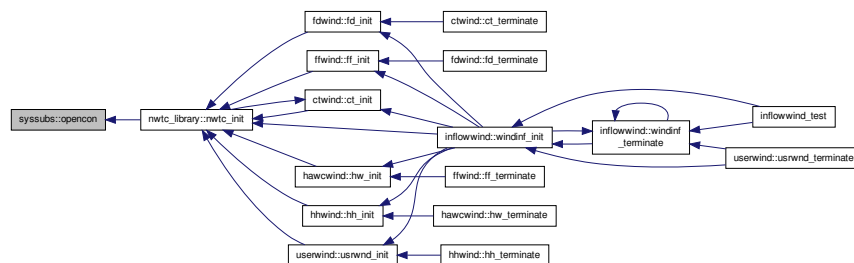
3.36.2.35 subroutine syssubs::opencon ( )

Definition at line 681 of file tempassembled.f90.

Here is the call graph for this function:



Here is the caller graph for this function:



### 3.36.2.36 subroutine syssubs::opencon ( )

Definition at line 14551 of file tempassembled.f90.

Here is the call graph for this function:



### 3.36.2.37 subroutine syssubs::openunfinpbefile ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(in) *RecLen*, logical, intent(out) *Error* )

Definition at line 14566 of file tempassembled.f90.

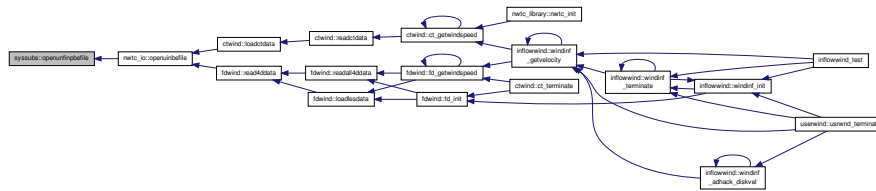
### 3.36.2.38 subroutine syssubs::openunfinpbefile ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(in) *RecLen*, logical, intent(out) *Error* )

Definition at line 28436 of file tempassembled.f90.

3.36.2.39 subroutine `syssubs::openunfinpbefile` ( integer, intent(in) *Un*, character(\*), intent(in) *InFile*, integer, intent(in) *RecLen*, logical, intent(out) *Error* )

Definition at line 696 of file tempassembled.f90.

Here is the caller graph for this function:



### 3.36.2.40 subroutine syssubs::progexit ( integer, intent(in) StatCode )

Definition at line 14614 of file tempassembled.f90.

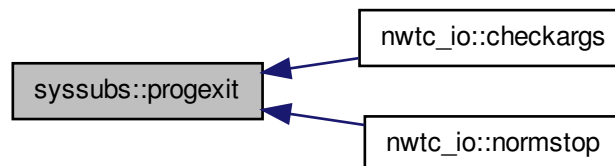
### 3.36.2.41 subroutine syssubs::progexit ( integer, intent(in) StatCode )

Definition at line 28484 of file tempassembled.f90.

### 3.36.2.42 subroutine syssubs::progexit ( integer, intent(in) StatCode )

Definition at line 744 of file tempassembled.f90.

Here is the caller graph for this function:



### 3.36.2.43 subroutine syssubs::usralarm ( )

Definition at line 14643 of file tempassembled.f90.

Here is the call graph for this function:



#### 3.36.2.44 subroutine syssubs::usralarm ( )

Definition at line 28513 of file tempassembled.f90.

Here is the call graph for this function:



#### 3.36.2.45 subroutine syssubs::usralarm ( )

Definition at line 773 of file tempassembled.f90.

Here is the call graph for this function:



Here is the caller graph for this function:



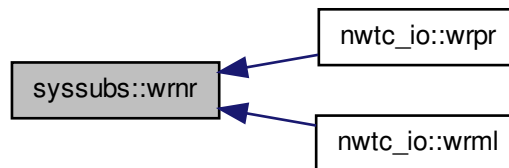
**3.36.2.46** subroutine `syssubs::wnr` ( `character(*)`, `intent(in) Str` )

Definition at line 28554 of file `tempassembled.f90`.

**3.36.2.47** subroutine `syssubs::wnr` ( `character(*)`, `intent(in) Str` )

Definition at line 814 of file `tempassembled.f90`.

Here is the caller graph for this function:



**3.36.2.48** subroutine `syssubs::wnr` ( `character(*)`, `intent(in) Str` )

Definition at line 14684 of file `tempassembled.f90`.

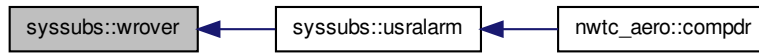
**3.36.2.49** subroutine `syssubs::wrover` ( `character(*)`, `intent(in) Str` )

Definition at line 14702 of file `tempassembled.f90`.

**3.36.2.50** subroutine `syssubs::wrover` ( `character(*)`, `intent(in) Str` )

Definition at line 832 of file `tempassembled.f90`.

Here is the caller graph for this function:



**3.36.2.51** subroutine `syssubs::wrover` ( `character(*)`, `intent(in) Str` )

Definition at line 28572 of file `tempassembled.f90`.

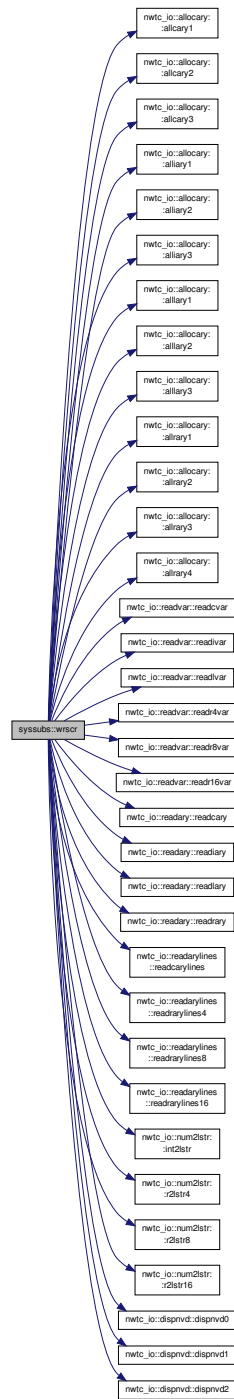
**3.36.2.52** subroutine, `dimension()` `syssubs::wrscr` ( `character(*)`, `intent(in) Str` )

Definition at line 850 of file `tempassembled.f90`.

Definition at line 14720 of file tempassembled.f90.



Here is the call graph for this function:



#### 3.36.2.54 subroutine, dimension() syssubs::wrscr ( character(\*), intent(in) Str )

Definition at line 28590 of file tempassembled.f90.

[illegible]

Generated on Mon Dec 10 2012 16:25:18 for Wave by Doxygen

**3.36.3.1 character( 1) syssubs::be**

Definition at line 242 of file tempassembled.f90.

**3.36.3.2 character( 1) syssubs::but**

Definition at line 242 of file tempassembled.f90.

**3.36.3.3 character( 1) syssubs::by**

Definition at line 242 of file tempassembled.f90.

**3.36.3.4 character( 1) syssubs::called**

Definition at line 242 of file tempassembled.f90.

**3.36.3.5 integer syssubs::conrecl = 120**

Definition at line 156 of file tempassembled.f90.

**3.36.3.6 integer syssubs::cu = 6**

Definition at line 157 of file tempassembled.f90.

**3.36.3.7 character(10) syssubs::endian = 'BIG\_ENDIAN'**

Definition at line 160 of file tempassembled.f90.

**3.36.3.8 character( 1) syssubs::here**

Definition at line 242 of file tempassembled.f90.

**3.36.3.9 integer syssubs::ic**

Definition at line 258 of file tempassembled.f90.

**3.36.3.10 character( 1) syssubs::is**

Definition at line 242 of file tempassembled.f90.

**3.36.3.11 character( 1) syssubs::it**

Definition at line 242 of file tempassembled.f90.

**3.36.3.12 integer, intent(in) syssubs::maxlen**

Definition at line 250 of file tempassembled.f90.

**3.36.3.13 character( 1) syssubs::must**

Definition at line 242 of file tempassembled.f90.

**3.36.3.14 integer syssubs::nl\_len = 2**

Definition at line 158 of file tempassembled.f90.

3.36.3.15 `character( 1) syssubs::pathsep = '\'` ! The path separator. `CHARACTER( 1) :: SwChar = '/'` ! The switch character for command-line options. 20110512 jm changed from 'BINARY' to 'UNFORMATTED' because 'BINARY' is not standard and caused problems in OPEN statements in NWTC\_IO.f90 that use this definition `CHARACTER(11) :: UnfForm = 'UNFORMATTED'` ! The string to specify unformatted I/O files. CONTAINS!===== FUNCTION `COMMAND_ARGUMENT_COUNT()` ! This routine returns the number of arguments entered on the command line. ! Note: This routine will be available intrinsically in Fortran 2000. ! Function declaration. `INTEGER :: COMMAND_ARGUMENT_COUNT` ! This function. The command line. ! Determine the number of arguments. Load the program name into the result. `COMMAND_ARGUMENT_COUNT = IArgC()` RETURN END FUNCTION `COMMAND_ARGUMENT_COUNT` ! !===== SUBROUTINE `FileSize ( FileName, Size )` ! This routine calls the routine `Stat` to obtain the file size ! corresponding to a file name or returns -1 on error. ! mlb: WARNING!!! ! The standard version of the routine uses the file unit instead of file name. ! We need fix the routines that call this one. ! Argument declarations: `INTEGER, INTENT(OUT) :: Size` `CHARACTER(*)`, `INTENT(IN) :: FileName` ! Intrinsic declarations: `INTEGER(KIND=1) :: Stat` ! Local declarations: `INTEGER :: StatArray(12)` `INTEGER :: Status` `Status = Stat( FileName, StatArray )` IF ( `Status /= 0` ) THEN `Size = -1` ELSE `Size = StatArray(8)` END IF RETURN END SUBROUTINE `FileSize` ! ( `FileName, Size` )!===== SUBROUTINE `FindLine ( Str , MaxLen , StrEnd )` ! This routine finds one line of text with a maximum length of `MaxLen` from the `Str`. ! It tries to break the line at a blank. ! This routine isn't system specific

Definition at line 161 of file `tempassembled.f90`.

3.36.3.16 `character( 1) syssubs::so`

Definition at line 242 of file `tempassembled.f90`.

3.36.3.17 `character(*)`, `intent(in) syssubs::str`

Definition at line 253 of file `tempassembled.f90`.

3.36.3.18 `integer`, `intent(out) syssubs::strend`

Definition at line 251 of file `tempassembled.f90`.

3.36.3.19 `character( 1) syssubs::which`

Definition at line 242 of file `tempassembled.f90`.

3.36.3.20 `character( 1)`, `dimension()` `syssubs::wrscr`

Definition at line 242 of file `tempassembled.f90`.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

## 3.37 userwind Module Reference

### Public Member Functions

- subroutine, public `usrwnd_init` (`ErrStat`)
- real(reki) function, public `usrwnd_getvalue` (`VarName`, `ErrStat`)
- type(inflintrpout) function, public `usrwnd_getwindspeed` (`Time`, `InputPosition`, `ErrStat`)
- subroutine, public `usrwnd_terminate` (`ErrStat`)
- subroutine, public `usrwnd_init` (`ErrStat`)

- real(reki) function, public `usrwnd_getvalue` (VarName, ErrStat)
- type(inflintrpout) function, public `usrwnd_getwindspeed` (Time, InputPosition, ErrStat)
- subroutine, public `usrwnd_terminate` (ErrStat)
- subroutine, public `usrwnd_init` (ErrStat)
- real(reki) function, public `usrwnd_getvalue` (VarName, ErrStat)
- type(inflintrpout) function, public `usrwnd_getwindspeed` (Time, InputPosition, ErrStat)
- subroutine, public `usrwnd_terminate` (ErrStat)

#### Private Attributes

- logical, save `initialized` = .FALSE.
- real(reki) `uwmeanu`
- real(reki) `uwmeanv`
- real(reki) `uwmeanw`

#### 3.37.1 Detailed Description

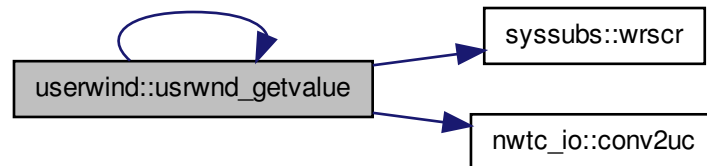
Definition at line 12812 of file tempassembled.f90.

#### 3.37.2 Member Function/Subroutine Documentation

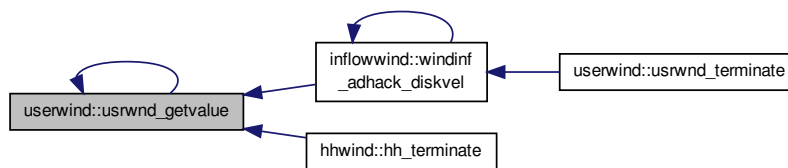
3.37.2.1 real(reki) function, public `userwind::usrwnd_getvalue` ( character(\*), intent(in) *VarName*, integer, intent(out) *ErrStat* )

Definition at line 12885 of file tempassembled.f90.

Here is the call graph for this function:



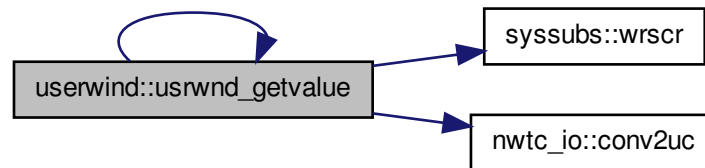
Here is the caller graph for this function:



### 3.37.2.2 `real(reki)` function, public `userwind::usrwnd_getvalue ( character(*), intent(in) VarName, integer, intent(out) ErrStat )`

Definition at line 40625 of file `tempassembled.f90`.

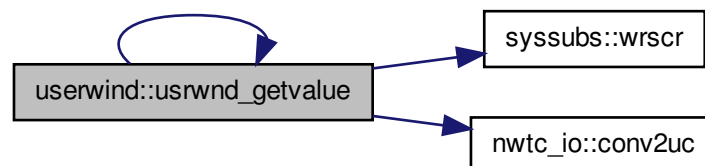
Here is the call graph for this function:



### 3.37.2.3 `real(reki)` function, public `userwind::usrwnd_getvalue ( character(*), intent(in) VarName, integer, intent(out) ErrStat )`

Definition at line 26755 of file `tempassembled.f90`.

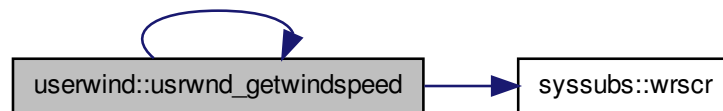
Here is the call graph for this function:



3.37.2.4 `type(inflintrpout)` function, public `userwind::usrwnd_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 40679 of file `tempassembled.f90`.

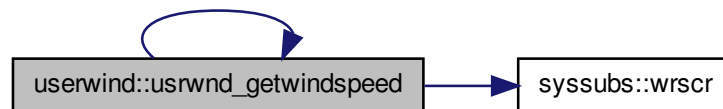
Here is the call graph for this function:



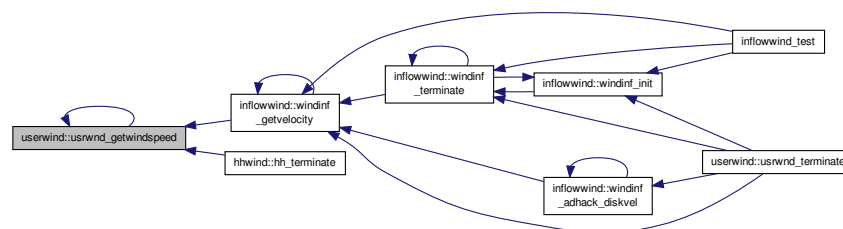
3.37.2.5 `type(inflintrpout)` function, public `userwind::usrwnd_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 12939 of file `tempassembled.f90`.

Here is the call graph for this function:



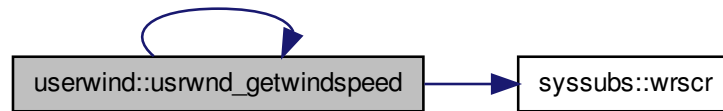
Here is the caller graph for this function:



3.37.2.6 `type(inflintrpout) function, public userwind::usrwnd_getwindspeed ( real(reki), intent(in) Time, real(reki), dimension(3), intent(in) InputPosition, integer, intent(out) ErrStat )`

Definition at line 26809 of file `tempassembled.f90`.

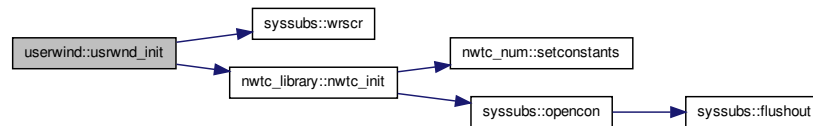
Here is the call graph for this function:



3.37.2.7 `subroutine, public userwind::usrwnd_init ( integer, intent(out) ErrStat )`

Definition at line 40581 of file `tempassembled.f90`.

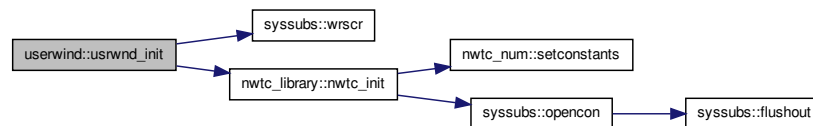
Here is the call graph for this function:



3.37.2.8 `subroutine, public userwind::usrwnd_init ( integer, intent(out) ErrStat )`

Definition at line 26711 of file `tempassembled.f90`.

Here is the call graph for this function:

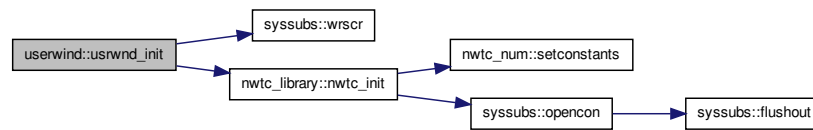


3.37.2.9 `subroutine, public userwind::usrwnd_init ( integer, intent(out) ErrStat )`

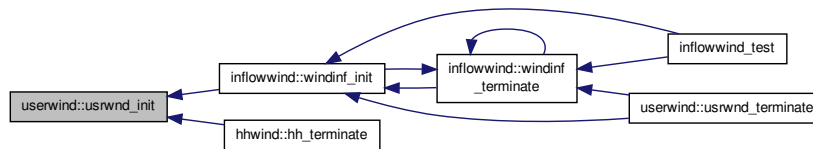
Definition at line 12841 of file `tempassembled.f90`.



Here is the call graph for this function:



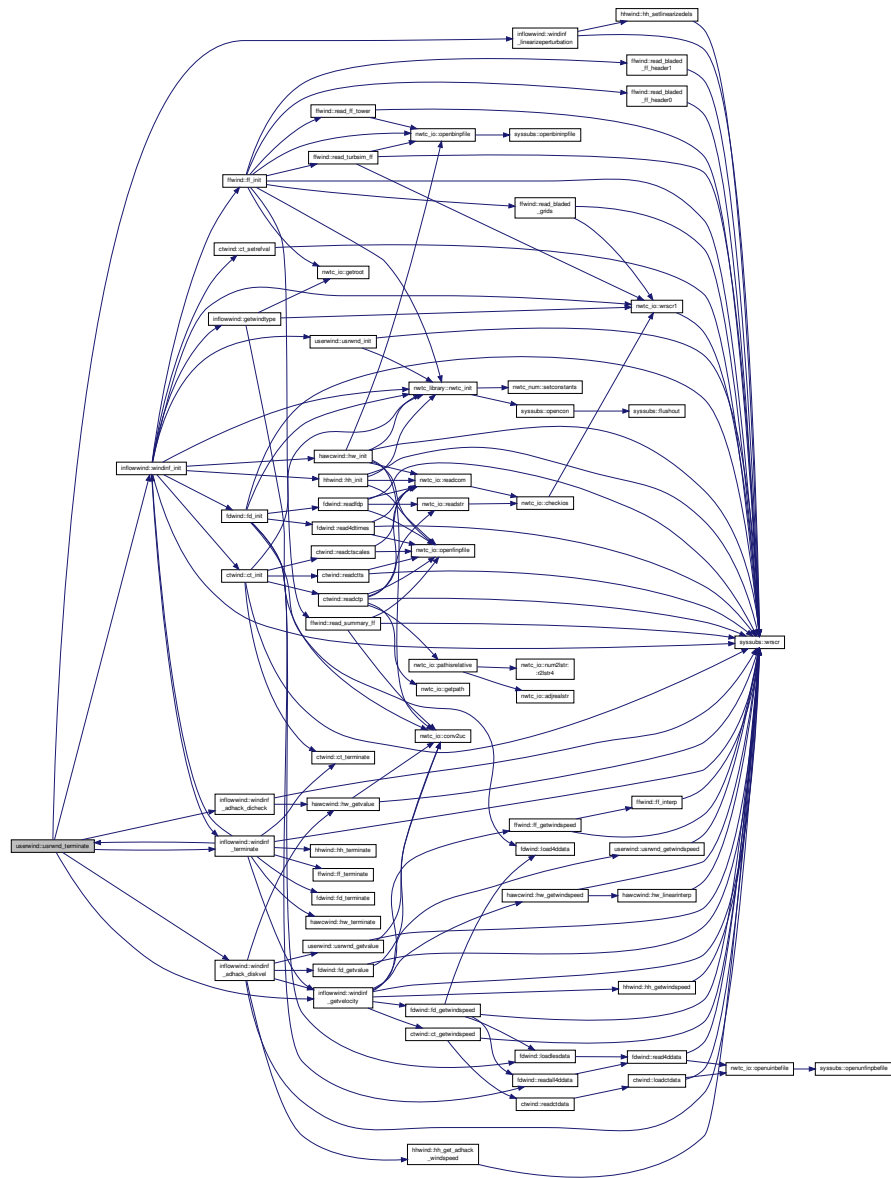
Here is the caller graph for this function:



#### 3.37.2.10 subroutine, public `userwind::usrwnd_terminate ( integer, intent(out) ErrStat )`

Definition at line 40720 of file `tempassembled.f90`.

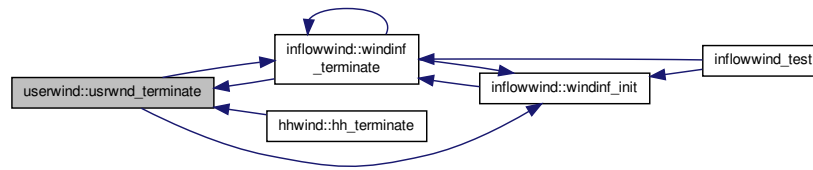
Here is the call graph for this function:



### 3.37.2.11 subroutine, public `userwind::usrwnd_terminate ( integer, intent(out) ErrStat )`

Definition at line 12980 of file `tempassembled.f90`.

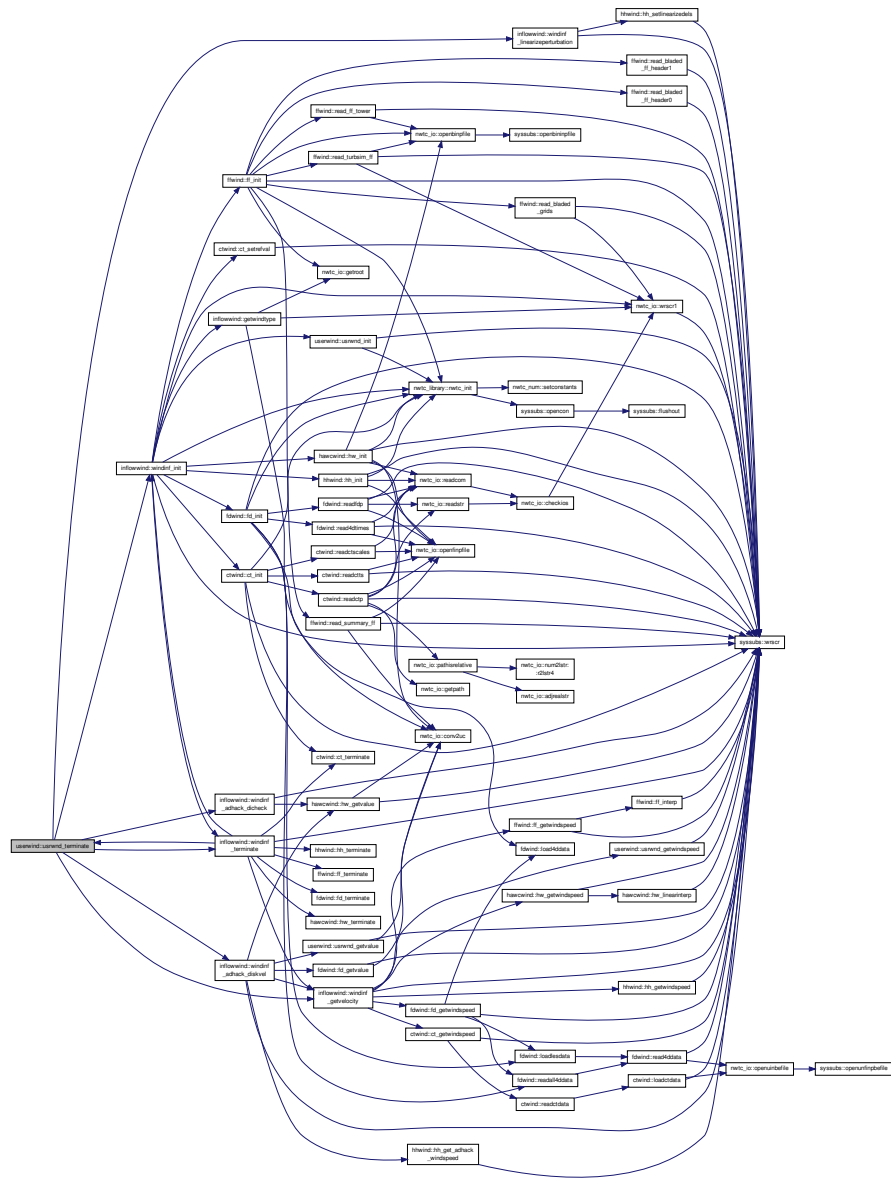
Here is the caller graph for this function:



3.37.2.12 subroutine, public `userwind::usrwnd_terminate ( integer, intent(out) ErrStat )`

Definition at line 26850 of file `tempassembled.f90`.

Here is the call graph for this function:



### 3.37.3 Member Data Documentation

#### 3.37.3.1 logical save userwind::initialized = .FALSE. [private]

Definition at line 12825 of file tempassembled.f90.

#### 3.37.3.2 real(reki) userwind::uwmeanu [private]

Definition at line 12827 of file tempassembled.f90.

3.37.3.3 `real(reki) userwind::uwmeanv` `[private]`

Definition at line 12828 of file `tempassembled.f90`.

3.37.3.4 `real(reki) userwind::uwmeanw` `[private]`

Definition at line 12829 of file `tempassembled.f90`.

The documentation for this module was generated from the following file:

- [tempassembled.f90](#)

## 4 File Documentation

### 4.1 tempassembled.f90 File Reference

#### Data Types

- module [precision](#)
- module [syssubs](#)
- module [nwtc\\_io](#)
- type [nwtc\\_io::progdesc](#)
- type [nwtc\\_io::fastdatatype](#)
- interface [nwtc\\_io::allocary](#)
- interface [nwtc\\_io::readvar](#)
- interface [nwtc\\_io::readary](#)
- interface [nwtc\\_io::readarylines](#)
- interface [nwtc\\_io::num2lstr](#)
- interface [nwtc\\_io::dispnvd](#)
- module [nwtc\\_num](#)
- interface [nwtc\\_num::equalrealnos](#)
- interface [nwtc\\_num::interpbin](#)
- interface [nwtc\\_num::interpstp](#)
- module [modmesh](#)
- type [modmesh::meshtype](#)
- module [nwtc\\_aero](#)
- type [nwtc\\_aero::aerodata](#)
- type [nwtc\\_aero::aerotable](#)
- type [nwtc\\_aero::alfindx](#)
- type [nwtc\\_aero::elmttable](#)
- module [nwtc\\_library](#)
- module [sharedinflowdefns](#)
- type [sharedinflowdefns::inflintrpout](#)
- module [ctwind](#)
- type [ctwind::ctwindfiles](#)
- type [ctwind::ct\\_backgr](#)
- module [fdwind](#)
- module [ffwind](#)
- interface [ffwind::ff\\_getvalue](#)
- module [hawcwind](#)
- module [hhwind](#)

- type `hhwind::hh_info`
- module `userwind`
- module `inflowwind`
- type `inflowwind::inflinitinfo`
- module `precision`
- module `syssubs`
- module `nwtc_io`
- type `nwtc_io::progdsc`
- type `nwtc_io::fastdatatype`
- interface `nwtc_io::allocary`
- interface `nwtc_io::readvar`
- interface `nwtc_io::readary`
- interface `nwtc_io::readarylines`
- interface `nwtc_io::num2lstr`
- interface `nwtc_io::dispnvd`
- module `nwtc_num`
- interface `nwtc_num::equalrealnos`
- interface `nwtc_num::interpbin`
- interface `nwtc_num::interpstp`
- module `modmesh`
- type `modmesh::meshtype`
- module `nwtc_aero`
- type `nwtc_aero::aerodata`
- type `nwtc_aero::aerotable`
- type `nwtc_aero::alfindx`
- type `nwtc_aero::elmtable`
- module `nwtc_library`
- module `sharedinflowdefns`
- type `sharedinflowdefns::inflintrpout`
- module `ctwind`
- type `ctwind::ctwindfiles`
- type `ctwind::ct_backgr`
- module `fdwind`
- module `ffwind`
- interface `ffwind::ff_getvalue`
- module `hawcwind`
- module `hhwind`
- type `hhwind::hh_info`
- module `userwind`
- module `inflowwind`
- type `inflowwind::inflinitinfo`
- module `precision`
- module `syssubs`
- module `nwtc_io`
- type `nwtc_io::progdsc`
- type `nwtc_io::fastdatatype`
- interface `nwtc_io::allocary`
- interface `nwtc_io::readvar`
- interface `nwtc_io::readary`
- interface `nwtc_io::readarylines`
- interface `nwtc_io::num2lstr`

- interface [nwtc\\_io::dispnvd](#)
- module [nwtc\\_num](#)
- interface [nwtc\\_num::equalrealnos](#)
- interface [nwtc\\_num::interpbin](#)
- interface [nwtc\\_num::interpstp](#)
- module [modmesh](#)
- type [modmesh::meshtype](#)
- module [nwtc\\_aero](#)
- type [nwtc\\_aero::aerodata](#)
- type [nwtc\\_aero::aerotable](#)
- type [nwtc\\_aero::alfindx](#)
- type [nwtc\\_aero::elmtable](#)
- module [nwtc\\_library](#)
- module [sharedinflowdefns](#)
- type [sharedinflowdefns::inflintrpout](#)
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- type [ctwind::ct\\_backgr](#)
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- module [hawcwind](#)
- module [hhwind](#)
- type [hhwind::hh\\_info](#)
- module [userwind](#)
- module [inflowwind](#)
- type [inflowwind::inflinitinfo](#)

#### Functions/Subroutines

- program [inflowwind\\_test](#)
- subroutine [exitthisroutine](#) (ErrID, Msg)

#### 4.1.1 Function/Subroutine Documentation

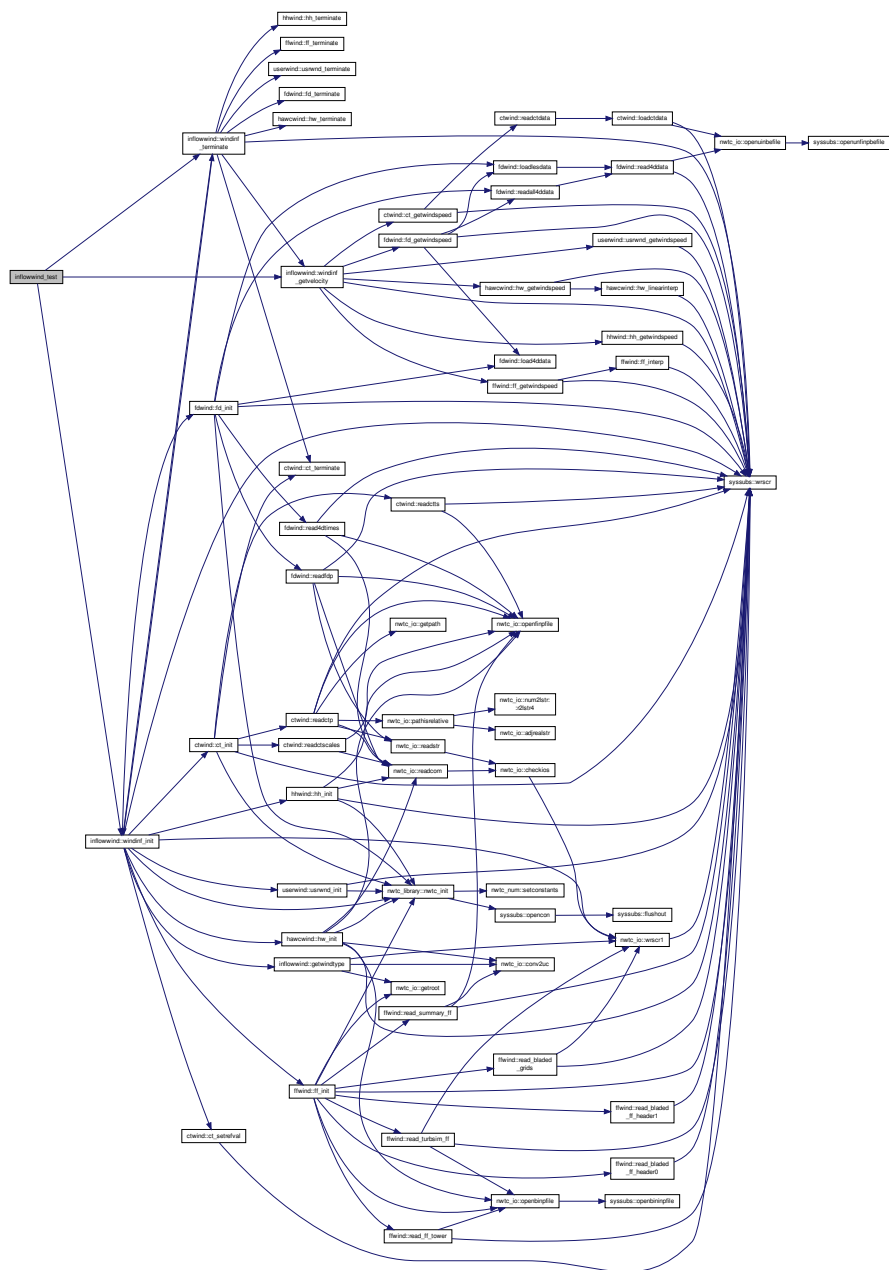
##### 4.1.1.1 subroutine [exitthisroutine](#) ( integer(intki), intent(in) *ErrID*, character(\*), intent(in) *Msg* )

Definition at line 3460 of file tempassembled.f90.

Here is the caller graph for this function:



Here is the call graph for this function:





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