InflowWind

Revision: 18 (last commit)

Generated by Doxygen 1.8.1.2

Wed Dec 19 2012 13:31:53

Contents

1 Data Type Index

1.1 Data Types List

Here are the data types with brief descriptions:

2 File Index

2.1 File List

Here is a list of all files with brief descriptions:

3 Data Type Documentation

3.1 ctwind::ct_backgr Type Reference

Public Attributes

- character(1024) windfile
- integer windfiletype
- logical coherentstr

3.1.1 Detailed Description

Definition at line 419 of file tempassembled.f90.

3.1.2 Member Data Documentation

3.1.2.1 logical ctwind::ct_backgr::coherentstr

Definition at line 422 of file tempassembled.f90.

3.1.2.2 character(1024) ctwind::ct_backgr::windfile

Definition at line 420 of file tempassembled.f90.

3.1.2.3 integer ctwind::ct_backgr::windfiletype

Definition at line 421 of file tempassembled.f90.

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

- tempassembled.f90

3.2 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)

Private Member Functions

- subroutine readctdata (UnWind, CTFileNo, Itime, ErrStat)
- subroutine loadctdata (UnWind, FileName, ITime, IComp, Vel, ErrStat)
- subroutine readctp (UnWind, FileName, CTPscaling, ErrStat)
- subroutine readctts (UnWind, FileName, CT_SC_ext, ErrStat)
- subroutine readctscales (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) ctly
- real(reki) ctlz
- real(reki) ctscalevel
- real(reki), dimension(:), allocatable tdata
- real(reki) ct_zref

- real(reki) ctyhwid
- real(reki) ctymax
- real(reki) ctyt
- real(reki) ctzmax
- real(reki) invmctws
- 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

3.2.1 Detailed Description

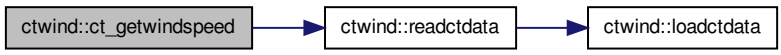
Definition at line 341 of file tempassembled.f90.

3.2.2 Member Function/Subroutine Documentation

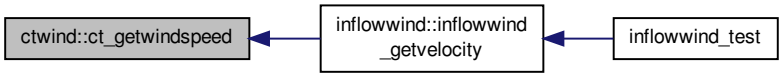
3.2.2.1 type(inflintrpout) function, public ctwind::ct_getwindspeed (real(reki), intent(in) *Time,* real(reki), dimension(3), intent(in) *InputPosition,* integer, intent(out) *ErrStat*)

Definition at line 638 of file tempassembled.f90.

Here is the call graph for this function:



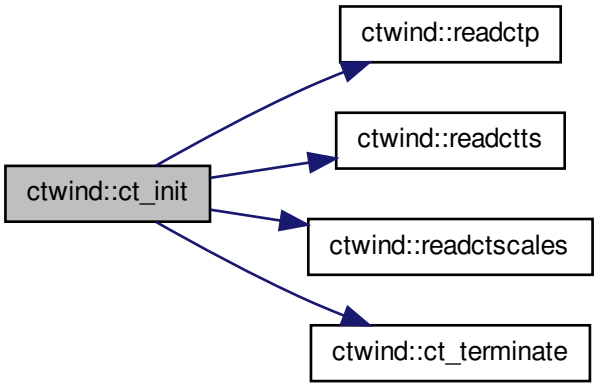
Here is the caller graph for this function:



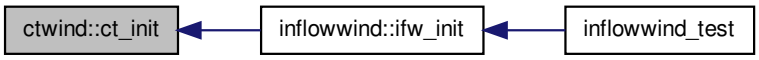
3.2.2.2 subroutine, public ctwind::ct_init (integer, intent(in) *UnWind,* character(∗), intent(in) *WindFile,* type(ct_backgr), intent(out) *BackGrndValues,* integer, intent(out) *ErrStat*)

Definition at line 433 of file tempassembled.f90.

Here is the call graph for this function:



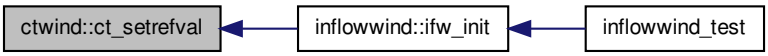
Here is the caller graph for this function:



3.2.2.3 subroutine, public ctwind::ct_setrefval (real(reki), intent(in) *Height,* real(reki), intent(in), optional *HWidth,* integer, intent(out) *ErrStat*)

Definition at line 584 of file tempassembled.f90.

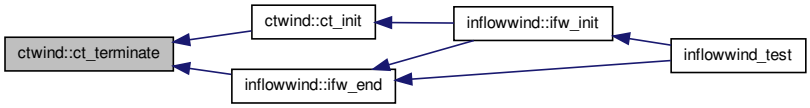
Here is the caller graph for this function:



3.2.2.4 subroutine, public ctwind::ct_terminate (integer, intent(out) *ErrStat*)

Definition at line 1318 of file tempassembled.f90.

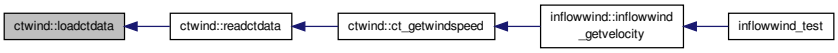
Here is the caller graph for this function:



3.2.2.5 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 968 of file tempassembled.f90.

Here is the caller graph for this function:

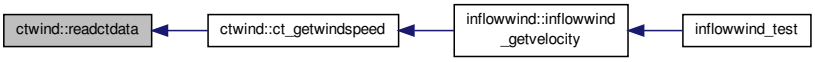


3.2.2.6 subroutine ctwind::readctdata (integer, intent(in) *UnWind,* integer, intent(in) *CTFileNo,* integer, intent(in) *Itime,* integer, intent(out) *ErrStat*) [private]

Definition at line 915 of file tempassembled.f90.

Here is the call graph for this function:

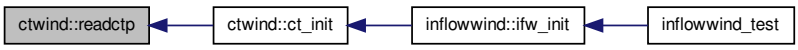
Here is the caller graph for this function:



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

Definition at line 1036 of file tempassembled.f90.

Here is the caller graph for this function:



3.2.2.8 subroutine ctwind::readctscales (integer, intent(in) *UnWind,* character(∗), intent(in) *FileName,* integer, intent(out) *ErrStat*) [private]

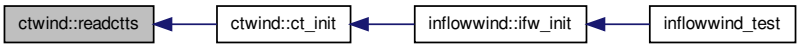
Definition at line 1258 of file tempassembled.f90.

Here is the caller graph for this function:

3.2.2.9 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 1116 of file tempassembled.f90.

Here is the caller graph for this function:



3.2.3 Member Data Documentation

3.2.3.1 integer ctwind::ct_df_y [private]

Definition at line 389 of file tempassembled.f90.

3.2.3.2 integer ctwind::ct_df_z [private]

Definition at line 390 of file tempassembled.f90.

3.2.3.3 real(reki) ctwind::ct_zref [private]

Definition at line 382 of file tempassembled.f90.

3.2.3.4 real(reki) ctwind::ctdistsc [private]

Definition at line 369 of file tempassembled.f90.

3.2.3.5 character(3) ctwind::ctext [private]

Definition at line 410 of file tempassembled.f90.

3.2.3.6 real(reki) ctwind::ctly [private]

Definition at line 377 of file tempassembled.f90.

3.2.3.7 real(reki) ctwind::ctlz [private]

Definition at line 378 of file tempassembled.f90.

3.2.3.8 real(reki), dimension (numcomps) ctwind::ctoffset [private]

Definition at line 370 of file tempassembled.f90.

3.2.3.9 real(reki), dimension (numcomps) ctwind::ctscale [private]

Definition at line 371 of file tempassembled.f90.

3.2.3.10 real(reki) ctwind::ctscalevel [private]

Definition at line 379 of file tempassembled.f90.

3.2.3.11 character(1024) ctwind::ctspath [private]

Definition at line 411 of file tempassembled.f90.

3.2.3.12 integer, dimension(2) ctwind::ctvel_files [private]

Definition at line 391 of file tempassembled.f90.

3.2.3.13 real(reki), dimension (:,:,:), allocatable ctwind::ctvelu [private]

Definition at line 374 of file tempassembled.f90.

3.2.3.14 real(reki), dimension (:,:,:), allocatable ctwind::ctvelv [private]

Definition at line 375 of file tempassembled.f90.

3.2.3.15 real(reki), dimension (:,:,:), allocatable ctwind::ctvelw [private]

Definition at line 376 of file tempassembled.f90.

3.2.3.16 logical ctwind::ctvertshft [private]

Definition at line 408 of file tempassembled.f90.

3.2.3.17 integer ctwind::ctwindunit [private]

Definition at line 406 of file tempassembled.f90.

3.2.3.18 real(reki) ctwind::ctyhwid [private]

Definition at line 383 of file tempassembled.f90.

3.2.3.19 real(reki) ctwind::ctymax [private]

Definition at line 384 of file tempassembled.f90.

3.2.3.20 real(reki) ctwind::ctyt [private]

Definition at line 385 of file tempassembled.f90.

3.2.3.21 real(reki) ctwind::ctzmax [private]

Definition at line 386 of file tempassembled.f90.

3.2.3.22 real(reki) ctwind::delyctgrid [private]

Definition at line 367 of file tempassembled.f90.

3.2.3.23 real(reki) ctwind::delzctgrid [private]

Definition at line 368 of file tempassembled.f90.

3.2.3.24 integer ctwind::indct_hi [private]

Definition at line 393 of file tempassembled.f90.

3.2.3.25 integer ctwind::indct_lo [private]

Definition at line 394 of file tempassembled.f90.

3.2.3.26 real(reki) ctwind::invmctws [private]

Definition at line 387 of file tempassembled.f90.

3.2.3.27 integer, parameter ctwind::numcomps = 3 [private]

Definition at line 364 of file tempassembled.f90.

3.2.3.28 integer ctwind::numctt [private]

Definition at line 396 of file tempassembled.f90.

3.2.3.29 integer ctwind::numcty [private]

Definition at line 397 of file tempassembled.f90.

3.2.3.30 integer ctwind::numctyd [private]

Definition at line 398 of file tempassembled.f90.

3.2.3.31 integer ctwind::numctyd1 [private]

Definition at line 399 of file tempassembled.f90.

3.2.3.32 integer ctwind::numctz [private]

Definition at line 400 of file tempassembled.f90.

3.2.3.33 integer ctwind::numctzd [private]

Definition at line 401 of file tempassembled.f90.

3.2.3.34 integer ctwind::numctzd1 [private]

Definition at line 402 of file tempassembled.f90.

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

Definition at line 380 of file tempassembled.f90.

3.2.3.36 integer, save ctwind::timeindx = 0 [private]

Definition at line 403 of file tempassembled.f90.

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

Definition at line 404 of file tempassembled.f90.

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

- tempassembled.f90

3.3 ctwind::ctwindfiles Type Reference

Private Attributes

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

3.3.1 Detailed Description

Definition at line 413 of file tempassembled.f90.

3.3.2 Member Data Documentation

3.3.2.1 character(1024) ctwind::ctwindfiles::ctbackgr [private]

Definition at line 415 of file tempassembled.f90.

3.3.2.2 character(1024) ctwind::ctwindfiles::cttsfile [private]

Definition at line 414 of file tempassembled.f90.

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

- tempassembled.f90

3.4 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)

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 (InpIndx)

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) scalevel
- 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

3.4.1 Detailed Description

Definition at line 1340 of file tempassembled.f90.

3.4.2 Member Function/Subroutine Documentation

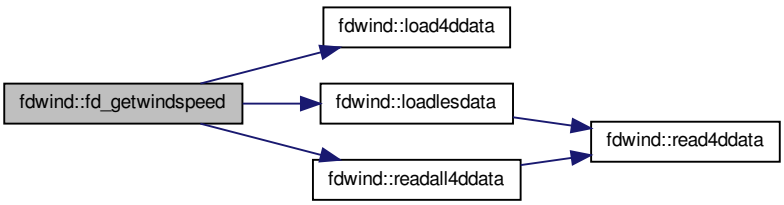
3.4.2.1 real(reki) function, public fdwind::fd_getvalue (character(∗), intent(in) *RVarName,* integer, intent(out) *ErrStat*)

Definition at line 2200 of file tempassembled.f90.

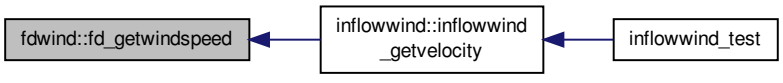
3.4.2.2 type(inflintrpout) function, public fdwind::fd_getwindspeed (real(reki), intent(in) *Time,* real(reki), dimension(3), intent(in) *InputPosition,* integer, intent(out) *ErrStat*)

Definition at line 2246 of file tempassembled.f90.

Here is the call graph for this function:



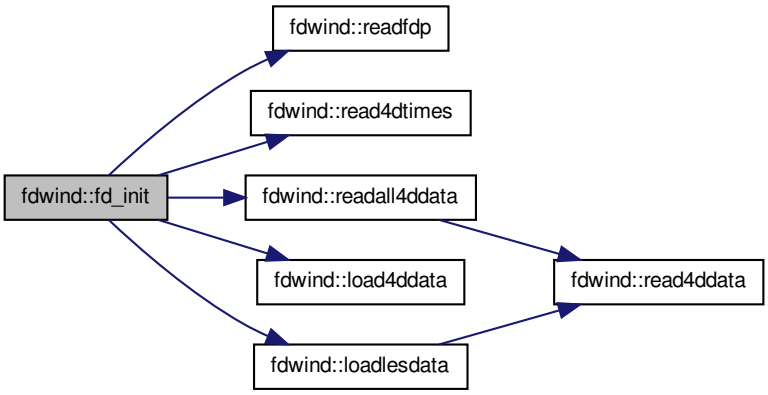
Here is the caller graph for this function:



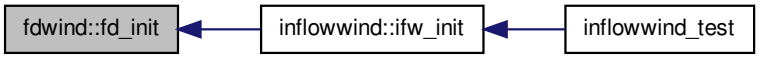
3.4.2.3 subroutine, public fdwind::fd_init (integer, intent(in) *UnWind,* character(∗), intent(in) *WindFile,* real(reki), intent(in) *RefHt,* integer, intent(out) *ErrStat*)

Definition at line 1433 of file tempassembled.f90.

Here is the call graph for this function:



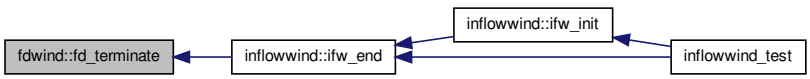
Here is the caller graph for this function:



3.4.2.4 subroutine, public fdwind::fd_terminate (integer, intent(out) *ErrStat*)

Definition at line 2578 of file tempassembled.f90.

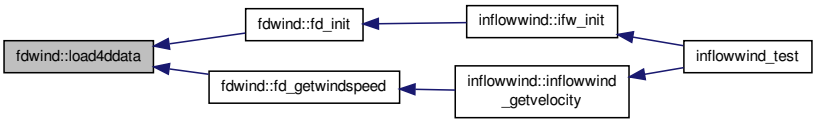
Here is the caller graph for this function:



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

Definition at line 2173 of file tempassembled.f90.

Here is the caller graph for this function:

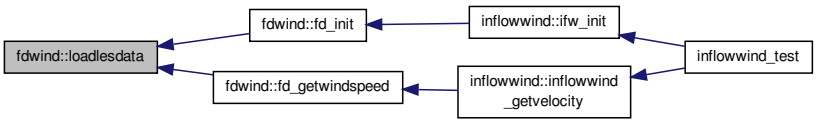


3.4.2.6 subroutine fdwind::loadlesdata (integer, intent(in) *UnWind,* integer, intent(in) *FileNo,* integer, intent(in) *Indx,* integer, intent(out) *ErrStat*) [private]

Definition at line 2051 of file tempassembled.f90.

Here is the call graph for this function:

Here is the caller graph for this function:



3.4.2.7 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 2088 of file tempassembled.f90.

Here is the caller graph for this function:

3.4.2.8 subroutine fdwind::read4dtimes (integer, intent(in) *UnWind,* character(∗), intent(in) *FileName,* integer, intent(out) *ErrStat*) [private]

Definition at line 1937 of file tempassembled.f90.

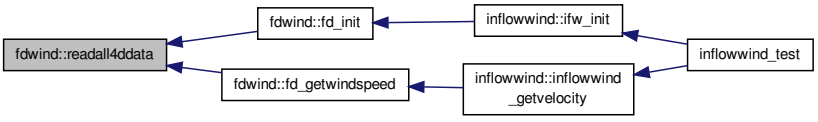
Here is the caller graph for this function:

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

Definition at line 2016 of file tempassembled.f90.

Here is the call graph for this function:

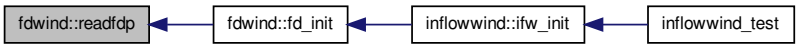
Here is the caller graph for this function:



3.4.2.10 subroutine fdwind::readfdp (integer, intent(in) *UnWind,* character(∗), intent(in) *FileName,* character(∗), intent(out) *FDTSfile,* integer, intent(out) *ErrStat*) [private]

Definition at line 1676 of file tempassembled.f90.

Here is the caller graph for this function:



3.4.3 Member Data Documentation

3.4.3.1 logical fdwind::advect [private]

Definition at line 1416 of file tempassembled.f90.

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

Definition at line 1421 of file tempassembled.f90.

3.4.3.3 real(reki) fdwind::delxgrid [private]

Definition at line 1359 of file tempassembled.f90.

3.4.3.4 real(reki) fdwind::delygrid [private]

Definition at line 1360 of file tempassembled.f90.

3.4.3.5 real(reki) fdwind::delzgrid [private]

Definition at line 1361 of file tempassembled.f90.

3.4.3.6 integer fdwind::fd_df_x [private]

Definition at line 1391 of file tempassembled.f90.

3.4.3.7 integer fdwind::fd_df_y [private]

Definition at line 1392 of file tempassembled.f90.

3.4.3.8 integer fdwind::fd_df_z [private]

Definition at line 1393 of file tempassembled.f90.

3.4.3.9 integer fdwind::fdfileno [private]

Definition at line 1394 of file tempassembled.f90.

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

Definition at line 1362 of file tempassembled.f90.

3.4.3.11 integer fdwind::fdrecl [private]

Definition at line 1395 of file tempassembled.f90.

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

Definition at line 1422 of file tempassembled.f90.

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

Definition at line 1363 of file tempassembled.f90.

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

Definition at line 1364 of file tempassembled.f90.

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

Definition at line 1367 of file tempassembled.f90.

3.4.3.16 integer fdwind::fdunit [private]

Definition at line 1414 of file tempassembled.f90.

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

Definition at line 1365 of file tempassembled.f90.

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

Definition at line 1368 of file tempassembled.f90.

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

Definition at line 1366 of file tempassembled.f90.

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

Definition at line 1369 of file tempassembled.f90.

3.4.3.21 integer fdwind::ind4dadv [private]

Definition at line 1396 of file tempassembled.f90.

3.4.3.22 integer fdwind::ind4dnew [private]

Definition at line 1397 of file tempassembled.f90.

3.4.3.23 integer fdwind::ind4dold [private]

Definition at line 1398 of file tempassembled.f90.

3.4.3.24 logical, save fdwind::initialized = .FALSE. [private]

Definition at line 1419 of file tempassembled.f90.

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

Definition at line 1370 of file tempassembled.f90.

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

Definition at line 1371 of file tempassembled.f90.

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

Definition at line 1372 of file tempassembled.f90.

3.4.3.28 integer fdwind::num4dt [private]

Definition at line 1399 of file tempassembled.f90.

3.4.3.29 integer, parameter fdwind::num4dtd = 2 [private]

Definition at line 1400 of file tempassembled.f90.

3.4.3.30 integer fdwind::num4dx [private]

Definition at line 1401 of file tempassembled.f90.

3.4.3.31 integer fdwind::num4dxd [private]

Definition at line 1402 of file tempassembled.f90.

3.4.3.32 integer fdwind::num4dxd1 [private]

Definition at line 1403 of file tempassembled.f90.

3.4.3.33 integer fdwind::num4dy [private]

Definition at line 1404 of file tempassembled.f90.

3.4.3.34 integer fdwind::num4dyd [private]

Definition at line 1405 of file tempassembled.f90.

3.4.3.35 integer fdwind::num4dyd1 [private]

Definition at line 1406 of file tempassembled.f90.

3.4.3.36 integer fdwind::num4dz [private]

Definition at line 1407 of file tempassembled.f90.

3.4.3.37 integer fdwind::num4dzd [private]

Definition at line 1408 of file tempassembled.f90.

3.4.3.38 integer fdwind::num4dzd1 [private]

Definition at line 1409 of file tempassembled.f90.

3.4.3.39 integer fdwind::numadvect [private]

Definition at line 1410 of file tempassembled.f90.

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

Definition at line 1373 of file tempassembled.f90.

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

Definition at line 1374 of file tempassembled.f90.

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

Definition at line 1375 of file tempassembled.f90.

3.4.3.43 real(reki) fdwind::scalevel [private]

Definition at line 1377 of file tempassembled.f90.

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

Definition at line 1376 of file tempassembled.f90.

3.4.3.45 integer fdwind::shft4dnew [private]

Definition at line 1411 of file tempassembled.f90.

3.4.3.46 real(reki) fdwind::t_4d_en [private]

Definition at line 1381 of file tempassembled.f90.

3.4.3.47 real(reki) fdwind::t_4d_st [private]

Definition at line 1382 of file tempassembled.f90.

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

Definition at line 1378 of file tempassembled.f90.

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

Definition at line 1412 of file tempassembled.f90.

3.4.3.50 real(reki) fdwind::tm_max [private]

Definition at line 1379 of file tempassembled.f90.

3.4.3.51 real(reki) fdwind::tsclfact [private]

Definition at line 1380 of file tempassembled.f90.

3.4.3.52 logical fdwind::vertshft [private]

Definition at line 1417 of file tempassembled.f90.

3.4.3.53 real(reki) fdwind::xmax [private]

Definition at line 1383 of file tempassembled.f90.

3.4.3.54 real(reki) fdwind::xt [private]

Definition at line 1384 of file tempassembled.f90.

3.4.3.55 real(reki) fdwind::ymax [private]

Definition at line 1385 of file tempassembled.f90.

3.4.3.56 real(reki) fdwind::yt [private]

Definition at line 1386 of file tempassembled.f90.

3.4.3.57 real(reki) fdwind::zmax [private]

Definition at line 1387 of file tempassembled.f90.

3.4.3.58 real(reki) fdwind::zref [private]

Definition at line 1389 of file tempassembled.f90.

3.4.3.59 real(reki) fdwind::zt [private]

Definition at line 1388 of file tempassembled.f90.

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

- tempassembled.f90

3.5 ffwind::ff_getvalue Interface Reference

Private Member Functions

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

3.5.1 Detailed Description

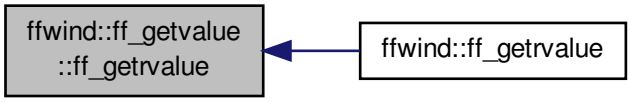
Definition at line 2653 of file tempassembled.f90.

3.5.2 Member Function/Subroutine Documentation

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

Definition at line 4208 of file tempassembled.f90.

Here is the caller graph for this function:



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

- tempassembled.f90

3.6 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)

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)

Private Attributes

- real(reki), dimension(:,:,:,:), allocatable ffdata
- real(reki), dimension(:,:,:), allocatable fftower
- real(reki) ffdtime
- 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.

3.6.1 Detailed Description

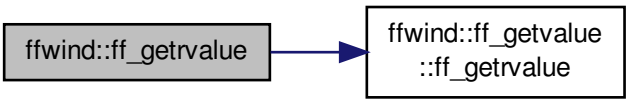
Definition at line 2604 of file tempassembled.f90.

3.6.2 Member Function/Subroutine Documentation

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

Definition at line 4208 of file tempassembled.f90.

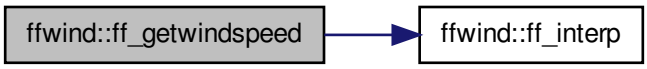
Here is the call graph for this function:



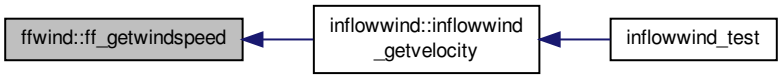
3.6.2.2 type(inflintrpout) function, public ffwind::ff_getwindspeed (real(reki), intent(in) *Time,* real(reki), dimension(3), intent(in) *InputPosition,* integer, intent(out) *ErrStat*)

Definition at line 4263 of file tempassembled.f90.

Here is the call graph for this function:



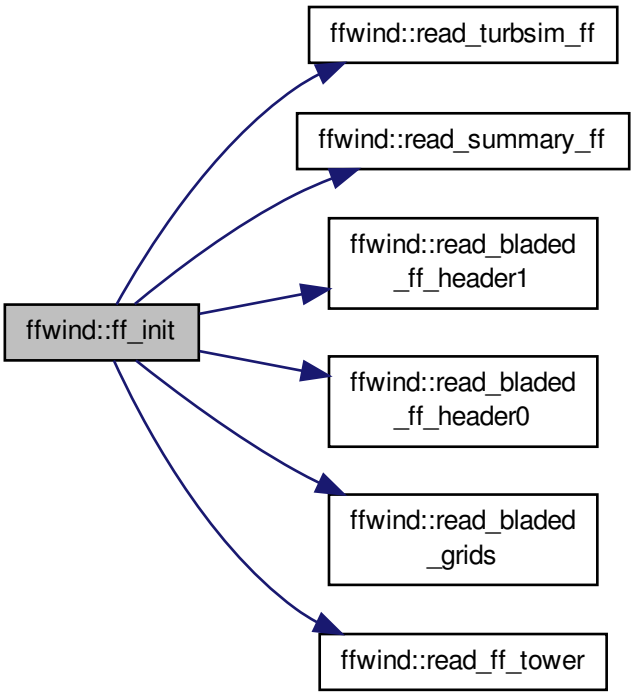
Here is the caller graph for this function:



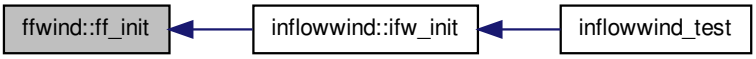
3.6.2.3 subroutine, public ffwind::ff_init (integer, intent(in) *UnWind,* character(∗), intent(in) *BinFile,* integer, intent(out) *ErrStat*)

Definition at line 2665 of file tempassembled.f90.

Here is the call graph for this function:



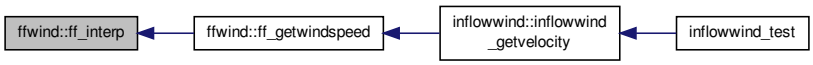
Here is the caller graph for this function:



3.6.2.4 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 4325 of file tempassembled.f90.

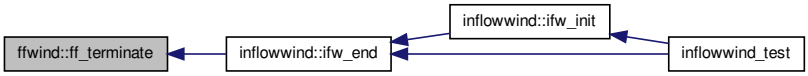
Here is the caller graph for this function:



3.6.2.5 subroutine, public ffwind::ff_terminate (integer, intent(out) *ErrStat*)

Definition at line 4626 of file tempassembled.f90.

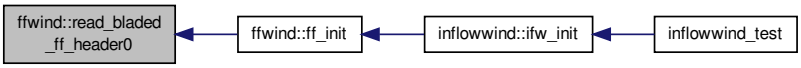
Here is the caller graph for this function:



3.6.2.6 subroutine ffwind::read_bladed_ff_header0 (integer, intent(in) *UnWind,* integer, intent(out) *ErrStat*) [private]

Definition at line 2845 of file tempassembled.f90.

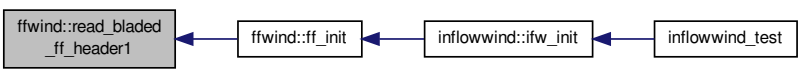
Here is the caller graph for this function:



3.6.2.7 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 2985 of file tempassembled.f90.

Here is the caller graph for this function:



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

Definition at line 3325 of file tempassembled.f90.

Here is the caller graph for this function:

3.6.2.9 subroutine ffwind::read_ff_tower (integer, intent(in) *UnWind,* character(∗), intent(in) *WindFile,* integer, intent(out) *ErrStat*) [private]

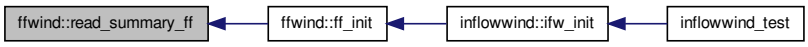
Definition at line 4003 of file tempassembled.f90.

Here is the caller graph for this function:

3.6.2.10 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 3463 of file tempassembled.f90.

Here is the caller graph for this function:



3.6.2.11 subroutine ffwind::read_turbsim_ff (integer, intent(in) *UnWind,* character(∗), intent(in) *WindFile,* integer, intent(out) *ErrStat*) [private]

Definition at line 3697 of file tempassembled.f90.

Here is the caller graph for this function:

3.6.3 Member Data Documentation

3.6.3.1 real(reki), dimension (:,:,:,:), allocatable ffwind::ffdata [private]

Definition at line 2627 of file tempassembled.f90.

3.6.3.2 real(reki) ffwind::ffdtime [private]

Definition at line 2630 of file tempassembled.f90.

3.6.3.3 real(reki) ffwind::ffrate [private]

Definition at line 2631 of file tempassembled.f90.

3.6.3.4 real(reki), dimension (:,:,:), allocatable ffwind::fftower [private]

Definition at line 2628 of file tempassembled.f90.

3.6.3.5 real(reki) ffwind::ffyhwid [private]

Definition at line 2632 of file tempassembled.f90.

3.6.3.6 real(reki) ffwind::ffzhwid [private]

Definition at line 2633 of file tempassembled.f90.

3.6.3.7 real(reki) ffwind::gridbase [private]

Definition at line 2635 of file tempassembled.f90.

3.6.3.8 logical, save ffwind::initialized = .FALSE. [private]

Definition at line 2649 of file tempassembled.f90.

3.6.3.9 real(reki) ffwind::initxposition [private]

Definition at line 2636 of file tempassembled.f90.

3.6.3.10 real(reki) ffwind::invffyd [private]

Definition at line 2637 of file tempassembled.f90.

3.6.3.11 real(reki) ffwind::invffzd [private]

Definition at line 2638 of file tempassembled.f90.

3.6.3.12 real(reki) ffwind::invmffws [private]

Definition at line 2639 of file tempassembled.f90.

3.6.3.13 real(reki) ffwind::meanffws [private]

Definition at line 2640 of file tempassembled.f90.

3.6.3.14 integer ffwind::nffcomp [private]

Definition at line 2643 of file tempassembled.f90.

3.6.3.15 integer ffwind::nffsteps [private]

Definition at line 2644 of file tempassembled.f90.

3.6.3.16 integer ffwind::ntgrids [private]

Definition at line 2647 of file tempassembled.f90.

3.6.3.17 integer ffwind::nygrids [private]

Definition at line 2645 of file tempassembled.f90.

3.6.3.18 integer ffwind::nzgrids [private]

Definition at line 2646 of file tempassembled.f90.

3.6.3.19 logical ffwind::periodic = .FALSE. [private]

Definition at line 2650 of file tempassembled.f90.

3.6.3.20 real(reki) ffwind::refht [private]

Definition at line 2634 of file tempassembled.f90.

3.6.3.21 real(reki) ffwind::totaltime [private]

Definition at line 2641 of file tempassembled.f90.

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

- tempassembled.f90

3.7 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)

Private Member Functions

- 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.

3.7.1 Detailed Description

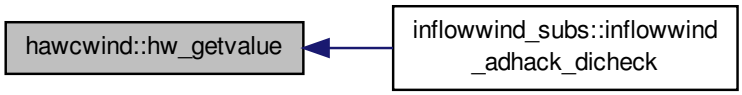
Definition at line 4645 of file tempassembled.f90.

3.7.2 Member Function/Subroutine Documentation

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

Definition at line 5015 of file tempassembled.f90.

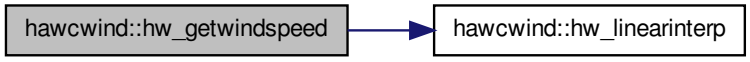
Here is the caller graph for this function:



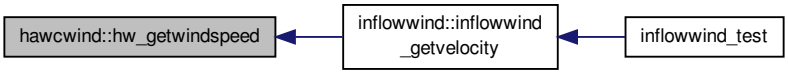
3.7.2.2 type(inflintrpout) function, public hawcwind::hw_getwindspeed (real(reki), intent(in) *Time,* real(reki), dimension(3), intent(in) *InputPosition,* integer, intent(out) *ErrStat*)

Definition at line 5070 of file tempassembled.f90.

Here is the call graph for this function:



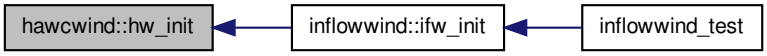
Here is the caller graph for this function:



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

Definition at line 4694 of file tempassembled.f90.

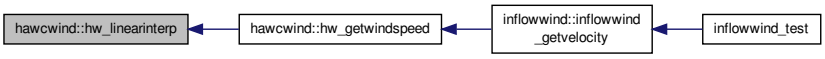
Here is the caller graph for this function:



3.7.2.4 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 5104 of file tempassembled.f90.

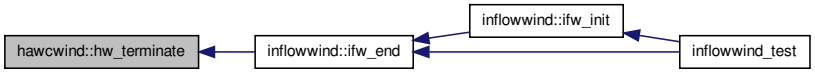
Here is the caller graph for this function:



3.7.2.5 subroutine, public hawcwind::hw_terminate (integer, intent(out) *ErrStat*)

Definition at line 5309 of file tempassembled.f90.

Here is the caller graph for this function:



3.7.3 Member Data Documentation

3.7.3.1 real(reki) hawcwind::deltaxinv [private]

Definition at line 4668 of file tempassembled.f90.

3.7.3.2 real(reki) hawcwind::deltayinv [private]

Definition at line 4669 of file tempassembled.f90.

3.7.3.3 real(reki) hawcwind::deltazinv [private]

Definition at line 4670 of file tempassembled.f90.

3.7.3.4 real(reki) hawcwind::gridbase [private]

Definition at line 4677 of file tempassembled.f90.

3.7.3.5 logical, save hawcwind::initialized = .FALSE. [private]

Definition at line 4684 of file tempassembled.f90.

3.7.3.6 real(reki) hawcwind::lengthx [private]

Definition at line 4678 of file tempassembled.f90.

3.7.3.7 real(reki) hawcwind::lengthyhalf [private]

Definition at line 4679 of file tempassembled.f90.

3.7.3.8 integer, parameter hawcwind::nc = 3 [private]

Definition at line 4672 of file tempassembled.f90.

3.7.3.9 integer hawcwind::nx [private]

Definition at line 4673 of file tempassembled.f90.

3.7.3.10 integer hawcwind::ny [private]

Definition at line 4674 of file tempassembled.f90.

3.7.3.11 integer hawcwind::nz [private]

Definition at line 4675 of file tempassembled.f90.

3.7.3.12 real(reki) hawcwind::refht [private]

Definition at line 4680 of file tempassembled.f90.

3.7.3.13 real(reki) hawcwind::uref [private]

Definition at line 4681 of file tempassembled.f90.

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

Definition at line 4666 of file tempassembled.f90.

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

- tempassembled.f90

3.8 hhwind::hh_info Type Reference

Public Attributes

- real(reki) referenceheight
- real(reki) width

3.8.1 Detailed Description

Definition at line 5376 of file tempassembled.f90.

3.8.2 Member Data Documentation

3.8.2.1 real(reki) hhwind::hh_info::referenceheight

Definition at line 5377 of file tempassembled.f90.

3.8.2.2 real(reki) hhwind::hh_info::width

Definition at line 5378 of file tempassembled.f90.

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

- tempassembled.f90

3.9 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)

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.

3.9.1 Detailed Description

Definition at line 5326 of file tempassembled.f90.

3.9.2 Member Function/Subroutine Documentation

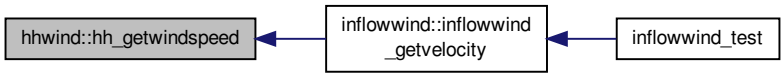
3.9.2.1 type(inflintrpout) function, public hhwind::hh_get_adhack_windspeed (real(reki), intent(in) *Time,* real(reki), dimension(3), intent(in) *InputPosition,* integer, intent(out) *ErrStat*)

Definition at line 5787 of file tempassembled.f90.

3.9.2.2 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 5656 of file tempassembled.f90.

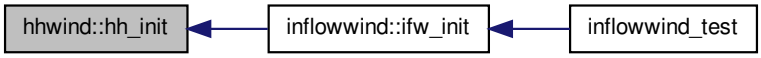
Here is the caller graph for this function:



3.9.2.3 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 5389 of file tempassembled.f90.

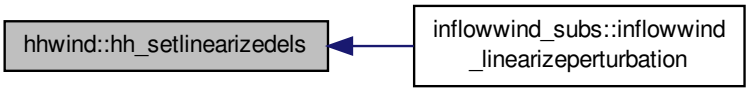
Here is the caller graph for this function:



3.9.2.4 subroutine, public hhwind::hh_setlinearizedels (real(reki), dimension(7), intent(in) *Perturbations,* integer, intent(out) *ErrStat*)

Definition at line 5880 of file tempassembled.f90.

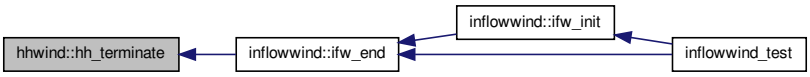
Here is the caller graph for this function:



3.9.2.5 subroutine, public hhwind::hh_terminate (integer, intent(out) *ErrStat*)

Definition at line 5906 of file tempassembled.f90.

Here is the caller graph for this function:



3.9.3 Member Data Documentation

3.9.3.1 real(reki), dimension (:), allocatable hhwind::delta [private]

Definition at line 5359 of file tempassembled.f90.

3.9.3.2 real(reki), dimension (:), allocatable hhwind::hshr [private]

Definition at line 5362 of file tempassembled.f90.

3.9.3.3 logical, save hhwind::linearize = .FALSE. [private]

Definition at line 5374 of file tempassembled.f90.

3.9.3.4 real(reki), dimension(7) hhwind::linearizedels [private]

Definition at line 5367 of file tempassembled.f90.

3.9.3.5 integer hhwind::numdatalines [private]

Definition at line 5371 of file tempassembled.f90.

3.9.3.6 real(reki) hhwind::refht [private]

Definition at line 5368 of file tempassembled.f90.

3.9.3.7 real(reki) hhwind::refwid [private]

Definition at line 5369 of file tempassembled.f90.

3.9.3.8 real(reki), dimension (:), allocatable hhwind::tdata [private]

Definition at line 5358 of file tempassembled.f90.

3.9.3.9 integer, save hhwind::timeindx = 0 [private]

Definition at line 5372 of file tempassembled.f90.

3.9.3.10 real(reki), dimension (:), allocatable hhwind::v [private]

Definition at line 5360 of file tempassembled.f90.

3.9.3.11 real(reki), dimension (:), allocatable hhwind::vgust [private]

Definition at line 5365 of file tempassembled.f90.

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

Definition at line 5364 of file tempassembled.f90.

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

Definition at line 5363 of file tempassembled.f90.

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

Definition at line 5361 of file tempassembled.f90.

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

- tempassembled.f90

3.10 sharedinflowdefs::ifw_constraintstatetype Type Reference

Public Attributes

- real(reki) dummyconstrstate

3.10.1 Detailed Description

Definition at line 68 of file tempassembled.f90.

3.10.2 Member Data Documentation

3.10.2.1 real(reki) sharedinflowdefs::ifw_constraintstatetype::dummyconstrstate

Definition at line 70 of file tempassembled.f90.

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

- tempassembled.f90

3.11 sharedinflowdefs::ifw_continuousstatetype Type Reference

Public Attributes

- real(reki) dummycontstate

3.11.1 Detailed Description

Definition at line 54 of file tempassembled.f90.

3.11.2 Member Data Documentation

3.11.2.1 real(reki) sharedinflowdefs::ifw_continuousstatetype::dummycontstate

Definition at line 56 of file tempassembled.f90.

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

- tempassembled.f90

3.12 sharedinflowdefs::ifw_discretestatetype Type Reference

Public Attributes

- real(reki) dummydiscstate

3.12.1 Detailed Description

Definition at line 62 of file tempassembled.f90.

3.12.2 Member Data Documentation

3.12.2.1 real(reki) sharedinflowdefs::ifw_discretestatetype::dummydiscstate

Definition at line 64 of file tempassembled.f90.

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

- tempassembled.f90

3.13 sharedinflowdefs::ifw_initinputtype Type Reference

Public Attributes

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

3.13.1 Detailed Description

Definition at line 40 of file tempassembled.f90.

3.13.2 Member Data Documentation

3.13.2.1 real(reki) sharedinflowdefs::ifw_initinputtype::referenceheight

Definition at line 47 of file tempassembled.f90.

3.13.2.2 real(reki) sharedinflowdefs::ifw_initinputtype::width

Definition at line 48 of file tempassembled.f90.

3.13.2.3 character(1024) sharedinflowdefs::ifw_initinputtype::windfilename

Definition at line 44 of file tempassembled.f90.

3.13.2.4 integer sharedinflowdefs::ifw_initinputtype::windfiletype

Definition at line 45 of file tempassembled.f90.

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

- tempassembled.f90

3.14 sharedinflowdefs::ifw_inputtype Type Reference

Public Attributes

- real(reki) dummyinput

3.14.1 Detailed Description

Definition at line 108 of file tempassembled.f90.

3.14.2 Member Data Documentation

3.14.2.1 real(reki) sharedinflowdefs::ifw_inputtype::dummyinput

Definition at line 112 of file tempassembled.f90.

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

- tempassembled.f90

3.15 sharedinflowdefs::ifw_otherstatetype Type Reference

Public Attributes

- integer(intki) dummyotherstate

3.15.1 Detailed Description

Definition at line 74 of file tempassembled.f90.

3.15.2 Member Data Documentation

3.15.2.1 integer(intki) sharedinflowdefs::ifw_otherstatetype::dummyotherstate

Definition at line 77 of file tempassembled.f90.

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

- tempassembled.f90

3.16 sharedinflowdefs::ifw_outputtype Type Reference

Public Attributes

- real(reki) dummyoutput

3.16.1 Detailed Description

Definition at line 118 of file tempassembled.f90.

3.16.2 Member Data Documentation

3.16.2.1 real(reki) sharedinflowdefs::ifw_outputtype::dummyoutput

Definition at line 122 of file tempassembled.f90.

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

- tempassembled.f90

3.17 sharedinflowdefs::ifw_parametertype Type Reference

Public Attributes

- character(1024) windfilename
- character(1024) windfilenameroot
- character(3) windfilenameext
- integer windfiletype = 0
- real(reki) referenceheight
- real(reki) width
- real(reki) halfwidth
- logical ct_flag = .FALSE.
- logical initialized = .FALSE.

3.17.1 Detailed Description

Definition at line 83 of file tempassembled.f90.

3.17.2 Member Data Documentation

3.17.2.1 logical sharedinflowdefs::ifw_parametertype::ct_flag = .FALSE.

Definition at line 100 of file tempassembled.f90.

3.17.2.2 real(reki) sharedinflowdefs::ifw_parametertype::halfwidth

Definition at line 97 of file tempassembled.f90.

3.17.2.3 logical sharedinflowdefs::ifw_parametertype::initialized = .FALSE.

Definition at line 101 of file tempassembled.f90.

3.17.2.4 real(reki) sharedinflowdefs::ifw_parametertype::referenceheight

Definition at line 94 of file tempassembled.f90.

3.17.2.5 real(reki) sharedinflowdefs::ifw_parametertype::width

Definition at line 95 of file tempassembled.f90.

3.17.2.6 character(1024) sharedinflowdefs::ifw_parametertype::windfilename

Definition at line 88 of file tempassembled.f90.

3.17.2.7 character(3) sharedinflowdefs::ifw_parametertype::windfilenameext

Definition at line 90 of file tempassembled.f90.

3.17.2.8 character(1024) sharedinflowdefs::ifw_parametertype::windfilenameroot

Definition at line 89 of file tempassembled.f90.

3.17.2.9 integer sharedinflowdefs::ifw_parametertype::windfiletype = 0

Definition at line 91 of file tempassembled.f90.

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

- tempassembled.f90

3.18 sharedinflowdefs::inflintrpout Type Reference

Public Attributes

- real(reki), dimension(3) velocity

3.18.1 Detailed Description

Definition at line 139 of file tempassembled.f90.

3.18.2 Member Data Documentation

3.18.2.1 real(reki), dimension(3) sharedinflowdefs::inflintrpout::velocity

Definition at line 140 of file tempassembled.f90.

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

- tempassembled.f90

3.19 inflowwind Module Reference

Public Member Functions

- subroutine, public ifw_init (InitData, ParamData, Interval, ErrStat, ErrMsg)

- type(inflintrpout) function, public inflowwind_getvelocity (ParamData, Time, InputPosition, ErrStat)
- subroutine, public ifw_end (ParamData, ErrStat)

Private Attributes

- integer(intki), parameter dataformatid = 1
- type(progdesc), parameter ifw_progdesc = ProgDesc('InflowWind', 'v1.00.00', '27-Dec-2012')
- integer unwind = 91

3.19.1 Detailed Description

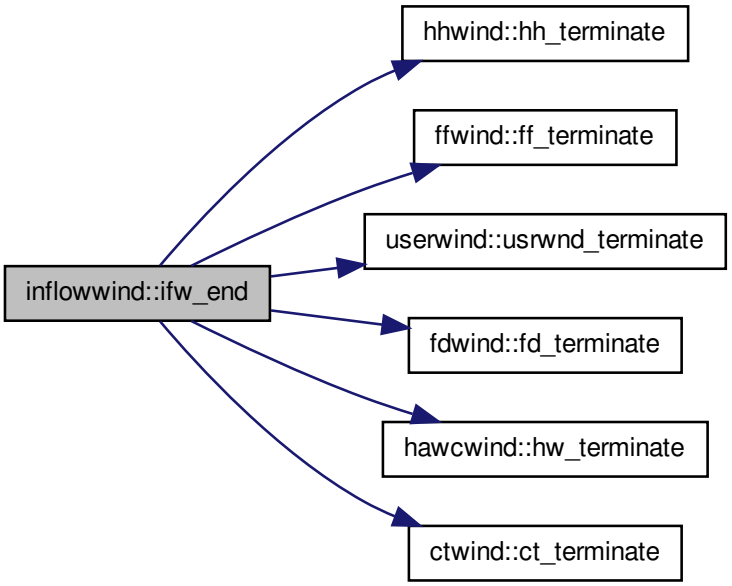
Definition at line 6786 of file tempassembled.f90.

3.19.2 Member Function/Subroutine Documentation

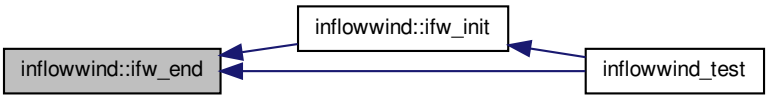
3.19.2.1 subroutine, public inflowwind::ifw_end (type(ifw_parametertype), intent(inout) *ParamData,* integer, intent(out) *ErrStat*)

Definition at line 7149 of file tempassembled.f90.

Here is the call graph for this function:



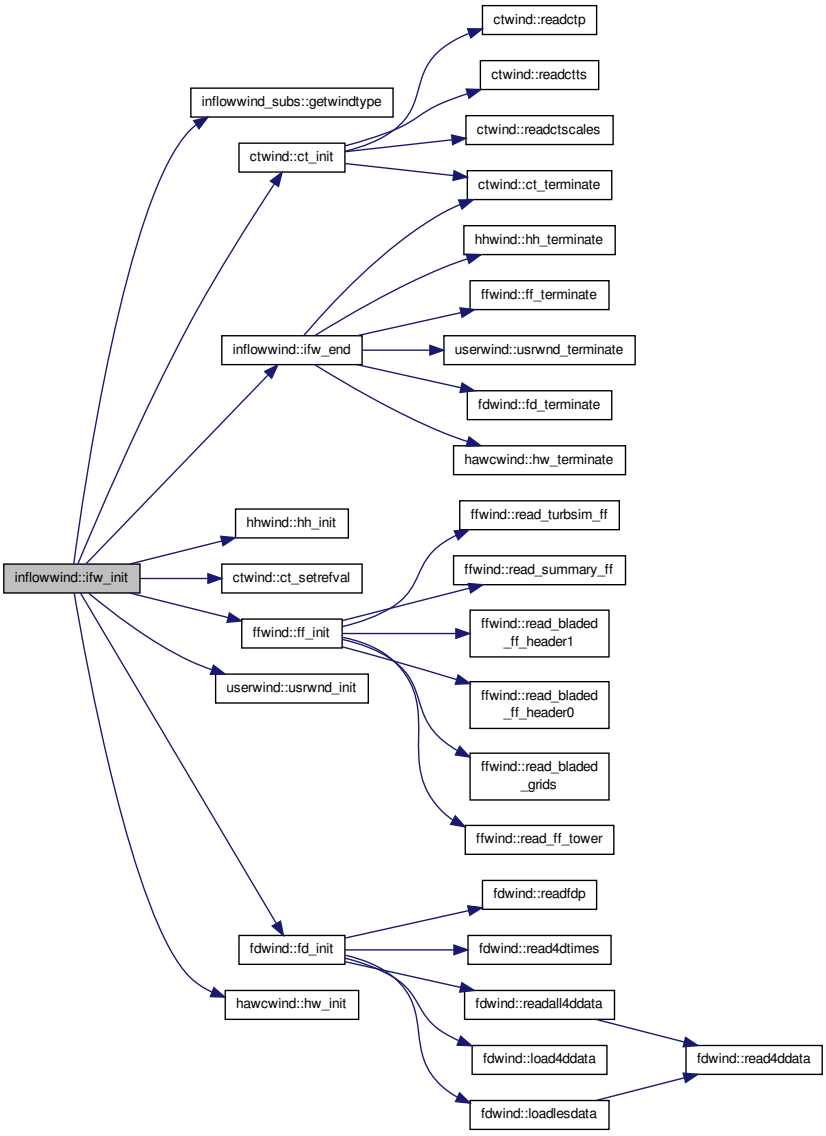
Here is the caller graph for this function:



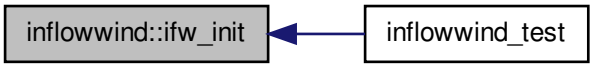
3.19.2.2 subroutine, public inflowwind::ifw_init (type(ifw_initinputtype), intent(in) *InitData,* type(ifw_parametertype), intent(out) *ParamData,* real(dbki), intent(inout) *Interval,* integer(intki), intent(out) *ErrStat,* character(∗), intent(out) *ErrMsg*)

Definition at line 6881 of file tempassembled.f90.

Here is the call graph for this function:



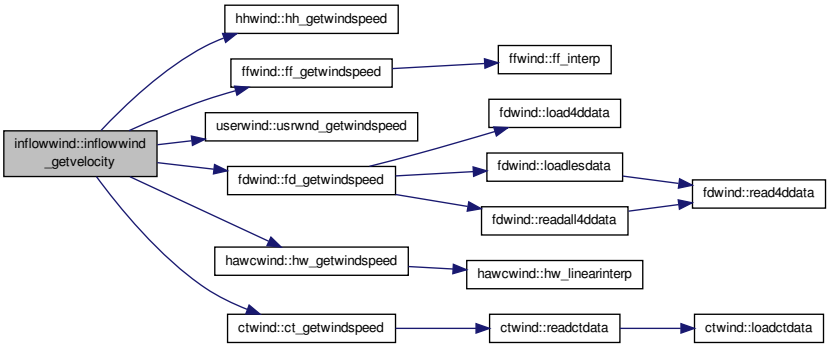
Here is the caller graph for this function:



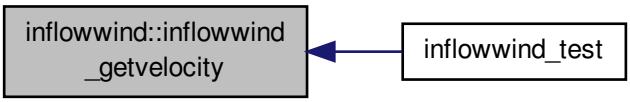
3.19.2.3 type(inflintrpout) function, public inflowwind::inflowwind_getvelocity (type(ifw_parametertype), intent(in) *ParamData,* real(reki), intent(in) *Time,* real(reki), dimension(3), intent(in) *InputPosition,* integer, intent(out) *ErrStat*)

Definition at line 7085 of file tempassembled.f90.

Here is the call graph for this function:



Here is the caller graph for this function:



3.19.3 Member Data Documentation

3.19.3.1 integer(intki), parameter inflowwind::dataformatid = 1 [private]

Definition at line 6818 of file tempassembled.f90.

3.19.3.2 type(progdesc), parameter inflowwind::ifw_progdesc = ProgDesc('InflowWind', 'v1.00.00', '27-Dec-2012') [private]

Definition at line 6820 of file tempassembled.f90.

3.19.3.3 integer inflowwind::unwind = 91 [private]

Definition at line 6854 of file tempassembled.f90.

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

- tempassembled.f90

3.20 inflowwind_subs Module Reference

Public Member Functions

- subroutine getwindtype (ParamData, ErrStat, ErrMsg)
- subroutine inflowwind_linearizeperturbation (ParamData, LinPerturbations, ErrStat)
- real(reki) function inflowwind_adhack_dicheck (ParamData, ErrStat)

3.20.1 Detailed Description

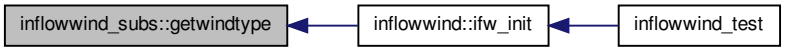
Definition at line 6141 of file tempassembled.f90.

3.20.2 Member Function/Subroutine Documentation

3.20.2.1 subroutine inflowwind_subs::getwindtype (type(ifw_parametertype), intent(inout) *ParamData,* integer(intki), intent(out) *ErrStat,* character(∗), intent(out) *ErrMsg*)

Definition at line 6194 of file tempassembled.f90.

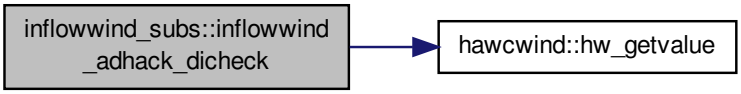
Here is the caller graph for this function:



3.20.2.2 real(reki) function inflowwind_subs::inflowwind_adhack_dicheck (type(ifw_parametertype), intent(inout) *ParamData,* integer, intent(out) *ErrStat*)

Definition at line 6472 of file tempassembled.f90.

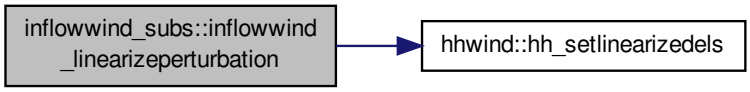
Here is the call graph for this function:



3.20.2.3 subroutine inflowwind_subs::inflowwind_linearizeperturbation (type(ifw_parametertype), intent(inout) *ParamData,* real(reki), dimension(7), intent(in) *LinPerturbations,* integer, intent(out) *ErrStat*)

Definition at line 6312 of file tempassembled.f90.

Here is the call graph for this function:



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

- tempassembled.f90

3.21 sharedinflowdefs Module Reference

Data Types

- type ifw_constraintstatetype
- type ifw_continuousstatetype
- type ifw_discretestatetype
- type ifw_initinputtype
- type ifw_inputtype
- type ifw_otherstatetype
- type ifw_outputtype
- type ifw_parametertype
- type inflintrpout

3.21.1 Detailed Description

Definition at line 12 of file tempassembled.f90.

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

- tempassembled.f90

3.22 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)

Private Attributes

- logical, save initialized = .FALSE.
- real(reki) uwmeanu
- real(reki) uwmeanv
- real(reki) uwmeanw

3.22.1 Detailed Description

Definition at line 5944 of file tempassembled.f90.

3.22.2 Member Function/Subroutine Documentation

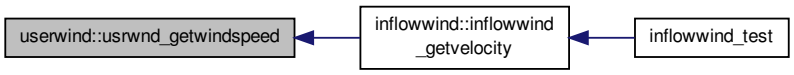
3.22.2.1 real(reki) function, public userwind::usrwnd_getvalue (character(∗), intent(in) *VarName,* integer, intent(out) *ErrStat*)

Definition at line 6018 of file tempassembled.f90.

3.22.2.2 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 6072 of file tempassembled.f90.

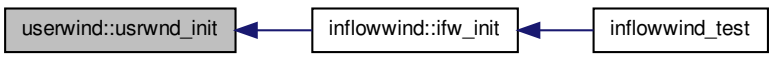
Here is the caller graph for this function:



3.22.2.3 subroutine, public userwind::usrwnd_init (integer, intent(out) *ErrStat*)

Definition at line 5974 of file tempassembled.f90.

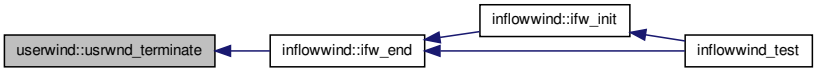
Here is the caller graph for this function:



3.22.2.4 subroutine, public userwind::usrwnd_terminate (integer, intent(out) *ErrStat*)

Definition at line 6113 of file tempassembled.f90.

Here is the caller graph for this function:



3.22.3 Member Data Documentation

3.22.3.1 logical, save userwind::initialized = .FALSE. [private]

Definition at line 5958 of file tempassembled.f90.

3.22.3.2 real(reki) userwind::uwmeanu [private]

Definition at line 5960 of file tempassembled.f90.

3.22.3.3 real(reki) userwind::uwmeanv [private]

Definition at line 5961 of file tempassembled.f90.

3.22.3.4 real(reki) userwind::uwmeanw [private]

Definition at line 5962 of file tempassembled.f90.

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

- tempassembled.f90

3.23 windfile_types Module Reference

Public Attributes

- integer, parameter default_wind = -1
- integer, parameter undef_wind = 0
- integer, parameter hh_wind = 1
- integer, parameter ff_wind = 2
- integer, parameter ud_wind = 3
- integer, parameter fd_wind = 4
- integer, parameter ctp_wind = 5
- integer, parameter hawc_wind = 6

3.23.1 Detailed Description

Definition at line 301 of file tempassembled.f90.

3.23.2 Member Data Documentation

3.23.2.1 integer, parameter windfile_types::ctp_wind = 5

Definition at line 337 of file tempassembled.f90.

3.23.2.2 integer, parameter windfile_types::default_wind = -1

Definition at line 331 of file tempassembled.f90.

3.23.2.3 integer, parameter windfile_types::fd_wind = 4

Definition at line 336 of file tempassembled.f90.

3.23.2.4 integer, parameter windfile_types::ff_wind = 2

Definition at line 334 of file tempassembled.f90.

3.23.2.5 integer, parameter windfile_types::hawc_wind = 6

Definition at line 338 of file tempassembled.f90.

3.23.2.6 integer, parameter windfile_types::hh_wind = 1

Definition at line 333 of file tempassembled.f90.

3.23.2.7 integer, parameter windfile_types::ud_wind = 3

Definition at line 335 of file tempassembled.f90.

3.23.2.8 integer, parameter windfile_types::undef_wind = 0

Definition at line 332 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 sharedinflowdefs
- type sharedinflowdefs::ifw_initinputtype
- type sharedinflowdefs::ifw_continuousstatetype
- type sharedinflowdefs::ifw_discretestatetype
- type sharedinflowdefs::ifw_constraintstatetype
- type sharedinflowdefs::ifw_otherstatetype
- type sharedinflowdefs::ifw_parametertype
- type sharedinflowdefs::ifw_inputtype
- type sharedinflowdefs::ifw_outputtype
- type sharedinflowdefs::inflintrpout
- module windfile_types
- 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_subs
- module inflowwind

Functions/Subroutines

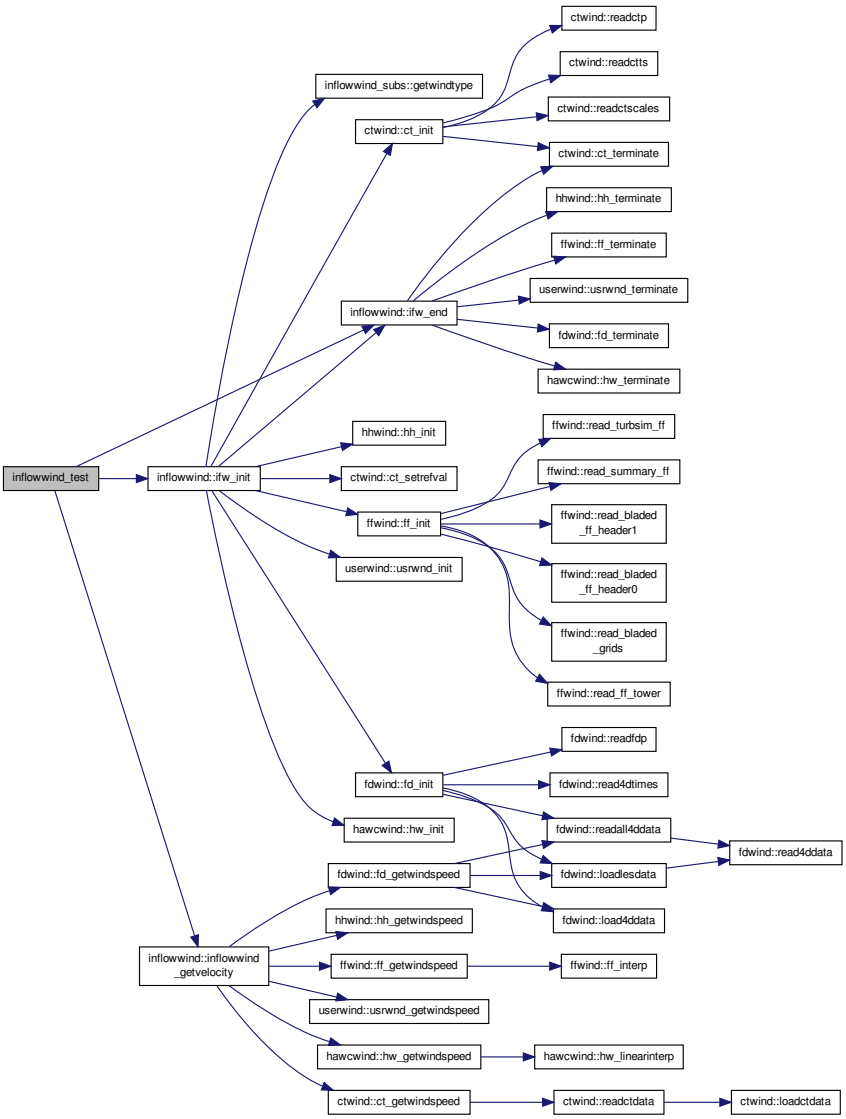
- program inflowwind_test

4.1.1 Function/Subroutine Documentation

4.1.1.1 program inflowwind_test ( )

Definition at line 7231 of file tempassembled.f90.

Here is the call graph for this function:



Index