

InflowWind

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1 Data Type Index

1.1 Data Types List

Here are the data types with brief descriptions:

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2 File Index

2.1 File List

Here is a list of all files with brief descriptions:

tempassembled.f90	12
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3 Data Type Documentation

3.1 IfW_HHWind::HH_Info Type Reference

Public Attributes

- REAL(ReKi) [ReferenceHeight](#)
- REAL(ReKi) [Width](#)

3.1.1 Detailed Description

Definition at line 191 of file tempassembled.f90.

3.1.2 Member Data Documentation

3.1.2.1 REAL(ReKi) IfW_HHWind::HH_Info::ReferenceHeight

Definition at line 192 of file tempassembled.f90.

3.1.2.2 REAL(ReKi) IfW_HHWind::HH_Info::Width

Definition at line 193 of file tempassembled.f90.

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

- [tempassembled.f90](#)

3.2 SharedInflowDefs::IfW_ConstraintStateType Type Reference

Public Attributes

- REAL(ReKi) [DummyConstrState](#)

3.2.1 Detailed Description

Definition at line 845 of file tempassembled.f90.

3.2.2 Member Data Documentation

3.2.2.1 REAL(ReKi) SharedInflowDefs::IfW_ConstraintStateType::DummyConstrState

Definition at line 847 of file tempassembled.f90.

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

- [tempassembled.f90](#)

3.3 SharedInflowDefs::IfW_ContinuousStateType Type Reference

Public Attributes

- REAL(ReKi) [DummyContState](#)

3.3.1 Detailed Description

Definition at line 831 of file tempassembled.f90.

3.3.2 Member Data Documentation

3.3.2.1 REAL(ReKi) SharedInflowDefs::IfW_ContinuousStateType::DummyContState

Definition at line 833 of file tempassembled.f90.

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

- [tempassembled.f90](#)

3.4 SharedInflowDefs::IfW_DiscreteStateType Type Reference

Public Attributes

- REAL(ReKi) [DummyDiscState](#)

3.4.1 Detailed Description

Definition at line 839 of file tempassembled.f90.

3.4.2 Member Data Documentation

3.4.2.1 REAL(ReKi) SharedInflowDefs::IfW_DiscreteStateType::DummyDiscState

Definition at line 841 of file tempassembled.f90.

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

- [tempassembled.f90](#)

3.5 IfW_HHWind Module Reference

Data Types

- type [HH_Info](#)

Public Member Functions

- subroutine, public [IfW_HHWind_Init](#) (UnWind, WindFile, WindInfo, ErrStat, ErrMsg)
- REAL(ReKi) function, public [IfW_HHWind_GetWindSpeed](#) (Time, InputPosition, ErrStat, ErrMsg)
- subroutine, public [IfW_HHWind_SetLinearizeDels](#) (Perturbations, ErrStat, ErrMsg)
- subroutine, public [IfW_HHWind_Terminate](#) (ErrStat, ErrMsg)

Private Attributes

- REAL(ReKi), allocatable [Tdata](#)
- REAL(ReKi), allocatable [DELTA](#)
- REAL(ReKi), allocatable [V](#)
- REAL(ReKi), allocatable [VZ](#)

- REAL(ReKi), allocatable [HSHR](#)
- REAL(ReKi), allocatable [VSHR](#)
- REAL(ReKi), allocatable [VLINSHR](#)
- REAL(ReKi), allocatable [VGUST](#)
- REAL(ReKi) [LinearizeDels](#)
- REAL(ReKi) [RefHt](#)
- REAL(ReKi) [RefWid](#)
- INTEGER [NumDataLines](#)
- INTEGER, save [TimeIndx](#) = 0
- LOGICAL, save [Linearize](#) = .FALSE.

3.5.1 Detailed Description

Definition at line 138 of file tempassembled.f90.

3.5.2 Member Function/Subroutine Documentation

- 3.5.2.1 REAL(ReKi) function, public IfW_HHWind::IfW_HHWind_GetWindSpeed (REAL(DbKi), intent(in) *Time*, REAL(ReKi), dimension(3), intent(in) *InputPosition*, INTEGER, intent(out) *ErrStat*, CHARACTER(*), intent(out) *ErrMsg*)

Definition at line 478 of file tempassembled.f90.

- 3.5.2.2 subroutine, public IfW_HHWind::IfW_HHWind_Init (INTEGER, intent(in) *UnWind*, CHARACTER(*), intent(in) *WindFile*, TYPE(HH_Info), intent(in) *WindInfo*, INTEGER, intent(out) *ErrStat*, CHARACTER(*), intent(out) *ErrMsg*)

Definition at line 204 of file tempassembled.f90.

- 3.5.2.3 subroutine, public IfW_HHWind::IfW_HHWind_SetLinearizeDels (REAL(ReKi), dimension(7), intent(in) *Perturbations*, INTEGER, intent(out) *ErrStat*, CHARACTER(*), intent(out) *ErrMsg*)

Definition at line 706 of file tempassembled.f90.

- 3.5.2.4 subroutine, public IfW_HHWind::IfW_HHWind_Terminate (INTEGER, intent(out) *ErrStat*, CHARACTER(1024), intent(out) *ErrMsg*)

Definition at line 733 of file tempassembled.f90.

3.5.3 Member Data Documentation

3.5.3.1 REAL(ReKi), allocatable IfW_HHWind::DELTA [private]

Definition at line 171 of file tempassembled.f90.

3.5.3.2 REAL(ReKi), allocatable IfW_HHWind::HSHR [private]

Definition at line 174 of file tempassembled.f90.

3.5.3.3 LOGICAL, save IfW_HHWind::Linearize = .FALSE. [private]

Definition at line 188 of file tempassembled.f90.

3.5.3.4 REAL(ReKi) IfW_HHWind::LinearizeDels [private]

Definition at line 179 of file tempassembled.f90.

3.5.3.5 INTEGER IfW_HHWind::NumDataLines [private]

Definition at line 183 of file tempassembled.f90.

3.5.3.6 REAL(ReKi) IfW_HHWind::RefHt [private]

Definition at line 180 of file tempassembled.f90.

3.5.3.7 REAL(ReKi) IfW_HHWind::RefWid [private]

Definition at line 181 of file tempassembled.f90.

3.5.3.8 REAL(ReKi), allocatable IfW_HHWind::Tdata [private]

Definition at line 170 of file tempassembled.f90.

3.5.3.9 INTEGER, save IfW_HHWind::TimeIndx = 0 [private]

Definition at line 185 of file tempassembled.f90.

3.5.3.10 REAL(ReKi), allocatable IfW_HHWind::V [private]

Definition at line 172 of file tempassembled.f90.

3.5.3.11 REAL(ReKi), allocatable IfW_HHWind::VGUST [private]

Definition at line 177 of file tempassembled.f90.

3.5.3.12 REAL(ReKi), allocatable IfW_HHWind::VLINSHR [private]

Definition at line 176 of file tempassembled.f90.

3.5.3.13 REAL(ReKi), allocatable IfW_HHWind::VSHR [private]

Definition at line 175 of file tempassembled.f90.

3.5.3.14 REAL(ReKi), allocatable IfW_HHWind::VZ [private]

Definition at line 173 of file tempassembled.f90.

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

- [tempassembled.f90](#)

3.6 SharedInflowDefs::IfW_InitInputType Type Reference**Public Attributes**

- CHARACTER(1024) [WindFileName](#)
- INTEGER [WindFileType](#)
- REAL(ReKi) [ReferenceHeight](#)
- REAL(ReKi) [Width](#)

3.6.1 Detailed Description

Definition at line 817 of file tempassembled.f90.

3.6.2 Member Data Documentation**3.6.2.1 REAL(ReKi) SharedInflowDefs::IfW_InitInputType::ReferenceHeight**

Definition at line 824 of file tempassembled.f90.

3.6.2.2 REAL(ReKi) SharedInflowDefs::IfW_InitInputType::Width

Definition at line 825 of file tempassembled.f90.

3.6.2.3 CHARACTER(1024) SharedInflowDefs::IfW_InitInputType::WindFileName

Definition at line 821 of file tempassembled.f90.

3.6.2.4 INTEGER SharedInflowDefs::IfW_InitInputType::WindFileType

Definition at line 822 of file tempassembled.f90.

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

- [tempassembled.f90](#)

3.7 SharedInflowDefs::IfW_InputType Type Reference

Public Attributes

- Real(ReKi), allocatable [Position](#)

3.7.1 Detailed Description

Definition at line 886 of file tempassembled.f90.

3.7.2 Member Data Documentation

3.7.2.1 Real(ReKi), allocatable SharedInflowDefs::IfW_InputType::Position

Definition at line 890 of file tempassembled.f90.

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

- [tempassembled.f90](#)

3.8 SharedInflowDefs::IfW_OtherStateType Type Reference

Public Attributes

- INTEGER(IntKi) [DummyOtherState](#)

3.8.1 Detailed Description

Definition at line 851 of file tempassembled.f90.

3.8.2 Member Data Documentation

3.8.2.1 INTEGER(IntKi) SharedInflowDefs::IfW_OtherStateType::DummyOtherState

Definition at line 854 of file tempassembled.f90.

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

- [tempassembled.f90](#)

3.9 SharedInflowDefs::IfW_OutputType Type Reference

Public Attributes

- REAL(ReKi), allocatable [Velocity](#)

3.9.1 Detailed Description

Definition at line 896 of file tempassembled.f90.

3.9.2 Member Data Documentation

3.9.2.1 REAL(ReKi), allocatable SharedInflowDefs::IfW_OutputType::Velocity

Definition at line 900 of file tempassembled.f90.

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

- [tempassembled.f90](#)

3.10 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.

3.10.1 Detailed Description

Definition at line 860 of file tempassembled.f90.

3.10.2 Member Data Documentation

3.10.2.1 LOGICAL SharedInflowDefs::IfW_ParameterType::CT_Flag = .FALSE.

Definition at line 877 of file tempassembled.f90.

3.10.2.2 REAL(ReKi) SharedInflowDefs::IfW_ParameterType::HalfWidth

Definition at line 874 of file tempassembled.f90.

3.10.2.3 LOGICAL SharedInflowDefs::IfW_ParameterType::Initialized = .FALSE.

Definition at line 878 of file tempassembled.f90.

3.10.2.4 REAL(ReKi) SharedInflowDefs::IfW_ParameterType::ReferenceHeight

Definition at line 871 of file tempassembled.f90.

3.10.2.5 REAL(ReKi) SharedInflowDefs::IfW_ParameterType::Width

Definition at line 872 of file tempassembled.f90.

3.10.2.6 CHARACTER(1024) SharedInflowDefs::IfW_ParameterType::WindFileName

Definition at line 865 of file tempassembled.f90.

3.10.2.7 CHARACTER(3) SharedInflowDefs::IfW_ParameterType::WindFileNameExt

Definition at line 867 of file tempassembled.f90.

3.10.2.8 CHARACTER(1024) SharedInflowDefs::IfW_ParameterType::WindFileName-Root

Definition at line 866 of file tempassembled.f90.

3.10.2.9 INTEGER SharedInflowDefs::IfW_ParameterType::WindFileType = 0

Definition at line 868 of file tempassembled.f90.

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

- [tempassembled.f90](#)

3.11 InflowWind_Module_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

3.11.1 Detailed Description

Definition at line 1080 of file [tempassembled.f90](#).

3.11.2 Member Data Documentation

3.11.2.1 INTEGER, parameter [InflowWind_Module_Types::CTP_Wind](#) = 5

Definition at line 1111 of file [tempassembled.f90](#).

3.11.2.2 INTEGER, parameter [InflowWind_Module_Types::DEFAULT_Wind](#) = -1

Definition at line 1105 of file [tempassembled.f90](#).

3.11.2.3 INTEGER, parameter [InflowWind_Module_Types::FD_Wind](#) = 4

Definition at line 1110 of file [tempassembled.f90](#).

3.11.2.4 INTEGER, parameter [InflowWind_Module_Types::FF_Wind](#) = 2

Definition at line 1108 of file [tempassembled.f90](#).

3.11.2.5 INTEGER, parameter [InflowWind_Module_Types::HAWC_Wind](#) = 6

Definition at line 1112 of file [tempassembled.f90](#).

3.11.2.6 INTEGER, parameter [InflowWind_Module_Types::HH_Wind](#) = 1

Definition at line 1107 of file [tempassembled.f90](#).

3.11.2.7 INTEGER, parameter [InflowWind_Module_Types::UD_Wind](#) = 3

Definition at line 1109 of file [tempassembled.f90](#).

3.11.2.8 INTEGER, parameter [InflowWind_Module_Types::Undef_Wind](#) = 0

Definition at line 1106 of file [tempassembled.f90](#).

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

- [tempassembled.f90](#)

3.12 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](#)

3.12.1 Detailed Description

Definition at line 789 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 [IfW_HHWind](#)
- type [IfW_HHWind::HH_Info](#)
- 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](#)
- module [InflowWind_Module_Types](#)

Functions/Subroutines

- program [HHWind_Test](#)

4.1.1 Function/Subroutine Documentation**4.1.1.1 program HHWind_Test ()**

Definition at line 1 of file tempassembled.f90.