

NEI_2011_radm

1.0

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Chapter 1

Modules Index

1.1 Modules List

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File Index

2.1 File List

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Chapter 3

Module Documentation

3.1 var_nei Module Reference

Functions/Subroutines

- subroutine [check](#) (status)
Verifies no error in netcdf function call.
- subroutine [lee_nml](#) (IX, JX, KX)
Reads dimensions from namelist file.

Variables

- integer [zlev](#)
- integer [hh](#)
- integer [nradm](#)
- integer, parameter [nh](#) =24
- integer, parameter [radm](#) =32
- integer, parameter [ndims](#) =6
- real, dimension(:,:,:), allocatable [emiss3d](#)
- real, dimension(:,:), allocatable [dlat](#)
- real, dimension(:,:), allocatable [dlon](#)
- real, dimension(:,:,:), allocatable [xlon](#)
- real, dimension(:,:,:), allocatable [xlat](#)
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- integer [julyr](#)
- integer [julday](#)
- integer [mapproj](#)
- integer [iswater](#)
- integer [islake](#)
- integer [isice](#)
- integer [isurban](#)
- integer [isoilwater](#)
- real [cenlat](#)
- real [cenlon](#)
- real [dx](#)
- real [dy](#)
- real [trulat1](#)

- real [trulat2](#)
- real [moadcenlat](#)
- real [stdlon](#)
- real [pollat](#)
- real [pollon](#)
- real [gmt](#)
- real [num_land_cat](#)
- character(len=3) [cday](#)
- character(len=9), dimension(:), allocatable [ename1](#)
- character(len=10), dimension(:), allocatable [ename](#)
- character(len=19) [mminlu](#)
- character(len=19) [map_proj_char](#)
- character(len=19) [itime](#)
- character(len=38) [title](#)
- character(len=19), dimension(1, 1) [times](#)
- character(len=19), dimension([ndims](#)) [sdim](#) = (/ "Time ", "DateStrLen ", "west_east ", "south_north ", "bottom_top ", "emissions_zdim_stag" /)
- character(len=19), dimension([radm](#)) [cname](#) = (/ "Sulfur Dioxide ", "Nitrogen oxide ", "Aldehydes ", "HCHO ", "Acetic Acid ", "Ammonia ", "Butanes ", "Pentanes ", "Alkane ", "Ethane ", "Carbon Monoxide ", "Alkanes ", "Terminal Alkenes", "Alkenes ", "Toluene ", "Xylene ", "Acetone ", "Cresol ", "Isoprene ", "Methane ", "PM25I ", "PM25J ", "SulfatesI ", "SulfatesJ ", "Nitrates ", "NitratesJ ", "OrganicI ", "OrganicJ ", "Elemental Carb I", "Elemental Carb J", "PM_10 ", "Nitrogen Dioxide" /)
- character(len=19) [current_date](#)
- character(len=19) [mecha](#)

3.1.1 Function/Subroutine Documentation

3.1.1.1 `check()`

```
subroutine var_nei::check (
    integer, intent(in) status )
```

Verifies no error in netcdf function call.

Parameters

<i>status</i>	NetCDF functions return a non-zero status codes on error.
---------------	---

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3.1.1.2 `lee_nml()`

```
subroutine var_nei::lee_nml (
    integer, intent(out) IX,
```

```
integer, intent(out) JX,  
integer, intent(out) KX )
```

Reads dimensions from namelist file.

Obtains from domain.nml file dimension of domain dimensions.

Author

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Parameters

<i>IX</i>	number of cell grid in W-E direction
<i>JX</i>	number of cell grid in S-N direction
<i>KX</i>	number of cell grid in vertical direction

3.1.2 Variable Documentation

3.1.2.1 cday

```
character(len=3) var_nei::cday
```

3.1.2.2 cenlat

```
real var_nei::cenlat
```

3.1.2.3 cenlon

```
real var_nei::cenlon
```

3.1.2.4 cname

```
character(len= 19), dimension(radm) var_nei::cname =(/'Sulfur Dioxide ', 'Nitrogen oxide ', 'Aldehydes  
, 'HCHO ', 'Acetic Acid ', 'Ammonia ', 'Butanes ', 'Pentanes ', 'Alkane ', 'Ethane ', 'Carbon Monoxide  
, 'Alkanes ', 'Terminal Alkenes', 'Alkenes ', 'Toluene ', 'Xylene ', 'Acetone ', 'Cresol ', 'Isoprene  
, 'Methane ', 'PM25I ', 'PM25J ', 'SulfatesI ', 'SulfatesJ ', 'Nitrates ', 'NitratesJ ', 'OrganicI  
, 'OrganicJ ', 'Elemental Carb I', 'Elemental Carb J', 'PM_10 ', 'Nitrogen Dioxide'/)
```

3.1.2.5 current_date

```
character (len=19) var_nei::current_date
```

3.1.2.6 dlat

```
real, dimension(:, :), allocatable var_nei::dlat
```

3.1.2.7 dlon

```
real, dimension(:, :), allocatable var_nei::dlon
```

3.1.2.8 dx

```
real var_nei::dx
```

3.1.2.9 dy

```
real var_nei::dy
```

3.1.2.10 emiss3d

```
real, dimension(:,:,:,:), allocatable var_nei::emiss3d
```

3.1.2.11 ename

```
character (len=10), dimension(:), allocatable var_nei::ename
```

3.1.2.12 ename1

```
character (len= 9), dimension(:), allocatable var_nei::ename1
```

3.1.2.13 gmt

```
real var_nei::gmt
```

3.1.2.14 grid_id

```
integer var_nei::grid_id
```

3.1.2.15 hh

```
integer var_nei::hh
```

3.1.2.16 isice

```
integer var_nei::isice
```

3.1.2.17 islake

```
integer var_nei::islake
```

3.1.2.18 isoilwater

```
integer var_nei::isoilwater
```

3.1.2.19 isurban

```
integer var_nei::isurban
```

3.1.2.20 iswater

```
integer var_nei::iswater
```

3.1.2.21 itime

```
character(len=19) var_nei::itime
```

3.1.2.22 julday

```
integer var_nei::julday
```

3.1.2.23 julyr

```
integer var_nei::julyr
```

3.1.2.24 map_proj_char

```
character(len=19) var_nei::map_proj_char
```

3.1.2.25 mapproj

```
integer var_nei::mapproj
```

3.1.2.26 mecha

```
character (len=19) var_nei::mecha
```

3.1.2.27 mminlu

```
character(len=19) var_nei::mminlu
```

3.1.2.28 moadcenlat

```
real var_nei::moadcenlat
```

3.1.2.29 ndims

```
integer, parameter var_nei::ndims =6
```

3.1.2.30 nh

```
integer, parameter var_nei::nh =24
```

3.1.2.31 nradm

```
integer var_nei::nradm
```

3.1.2.32 num_land_cat

```
real var_nei::num_land_cat
```

3.1.2.33 pollat

```
real var_nei::pollat
```

3.1.2.34 pollon

```
real var_nei::pollon
```

3.1.2.35 radm

```
integer, parameter var_nei::radm =32
```

3.1.2.36 sdim

```
character (len=19), dimension(ndims) var_nei::sdim =(/"Time ", "DateStrLen ", "west_east ", "south↵  
_north ", "bottom_top ", "emissions_zdim_stag"/)
```

3.1.2.37 stdlon

```
real var_nei::stdlon
```

3.1.2.38 times

```
character(len=19), dimension(1,1) var_nei::times
```

3.1.2.39 title

```
character(len=38) var_nei::title
```

3.1.2.40 trulat1

```
real var_nei::trulat1
```


3.1.2.41 trulat2

```
real var_nei::trulat2
```

3.1.2.42 xlat

```
real, dimension(:,:,:), allocatable var_nei::xlat
```

3.1.2.43 xlon

```
real, dimension(:,:,:), allocatable var_nei::xlon
```

3.1.2.44 zlev

```
integer var_nei::zlev
```


Chapter 4

File Documentation

4.1 source/convierte.F90 File Reference

Functions/Subroutines

- program [nei_2011](#)

4.1.1 Function/Subroutine Documentation

4.1.1.1 [nei_2011\(\)](#)

```
program nei_2011
```

4.2 source/guarda.F90 File Reference

Functions/Subroutines

- subroutine [guarda_emisiones](#)
- subroutine [crea_attr](#) (ncid, idm, dimids, svar, cname, id_var)
- subroutine [crea_attr2](#) (ncid, idm, dimids, svar, cname, id_var)

4.2.1 Function/Subroutine Documentation

4.2.1.1 crea_attr()

```
subroutine guarda_emisiones::crea_attr (
    integer, intent(in) ncid,
    integer, intent(in) idm,
    integer, dimension(idm), intent(in) dimids,
    character(len=*), intent(in) svar,
    character(len=*), intent(in) cname,
    integer, intent(out) id_var )
```

4.2.1.2 crea_attr2()

```
subroutine guarda_emisiones::crea_attr2 (
    integer, intent(in) ncid,
    integer, intent(in) idm,
    integer, dimension(idm), intent(in) dimids,
    character(len=*), intent(in) svar,
    character(len=*), intent(in) cname,
    integer, intent(out) id_var )
```

4.2.1.3 guarda_emisiones()

```
subroutine guarda_emisiones
```

4.3 source/lee_NEI.F90 File Reference

Functions/Subroutines

- subroutine [lee_nei](#)

4.3.1 Function/Subroutine Documentation

4.3.1.1 lee_nei()

```
subroutine lee_nei
```

4.4 source/lee_wrfinput.F90 File Reference

Functions/Subroutines

- subroutine [lee_wrfinput](#)

4.4.1 Function/Subroutine Documentation

4.4.1.1 lee_wrfinput()

```
subroutine lee_wrfinput
```

4.5 source/module_var_nei.F90 File Reference

Modules

- module [var_nei](#)

Functions/Subroutines

- subroutine [var_nei::check](#) (status)
Verifies no error in netcdf function call.
- subroutine [var_nei::lee_nml](#) (IX, JX, KX)
Reads dimensions from namelist file.

Variables

- integer [var_nei::zlev](#)
- integer [var_nei::hh](#)
- integer [var_nei::nradm](#)
- integer, parameter [var_nei::nh](#) =24
- integer, parameter [var_nei::radm](#) =32
- integer, parameter [var_nei::ndims](#) =6
- real, dimension(:, :, :, :), allocatable [var_nei::emiss3d](#)
- real, dimension(:, :), allocatable [var_nei::dlat](#)
- real, dimension(:, :), allocatable [var_nei::dlon](#)
- real, dimension(:, :, :), allocatable [var_nei::xlon](#)
- real, dimension(:, :, :), allocatable [var_nei::xlat](#)
- integer [var_nei::grid_id](#)
- integer [var_nei::julyr](#)
- integer [var_nei::julday](#)
- integer [var_nei::mapproj](#)
- integer [var_nei::iswater](#)
- integer [var_nei::islake](#)
- integer [var_nei::isice](#)
- integer [var_nei::isurban](#)
- integer [var_nei::isoilwater](#)
- real [var_nei::cenlat](#)
- real [var_nei::cenlon](#)
- real [var_nei::dx](#)
- real [var_nei::dy](#)
- real [var_nei::trulat1](#)

- real `var_nei::trulat2`
- real `var_nei::moadcenlat`
- real `var_nei::stdlon`
- real `var_nei::pollat`
- real `var_nei::pollon`
- real `var_nei::gmt`
- real `var_nei::num_land_cat`
- character(len=3) `var_nei::cday`
- character(len=9), dimension(:), allocatable `var_nei::ename1`
- character(len=10), dimension(:), allocatable `var_nei::ename`
- character(len=19) `var_nei::mminlu`
- character(len=19) `var_nei::map_proj_char`
- character(len=19) `var_nei::itime`
- character(len=38) `var_nei::title`
- character(len=19), dimension(1, 1) `var_nei::times`
- character(len=19), dimension(ndims) `var_nei::sdim` =(/"Time ", "DateStrLen ", "west_east ", "south_north ", "bottom_top ", "emissions_zdim_stag"/)
- character(len=19), dimension(radn) `var_nei::cname` =(/"Sulfur Dioxide ", "Nitrogen oxide ", "Aldehydes ", "HCHO ", "Acetic Acid ", "Ammonia ", "Butanes ", "Pentanes ", "Alkane ", "Ethane ", "Carbon Monoxide ", "Alkanes ", "Terminal Alkenes", "Alkenes ", "Toluene ", "Xylene ", "Acetone ", "Cresol ", "Isoprene ", "Methane ", "PM25I ", "PM25J ", "SulfatesI ", "SulfatesJ ", "Nitrates ", "NitratesJ ", "OrganicI ", "OrganicJ ", "Elemental Carb I", "Elemental Carb J", "PM_10 ", "Nitrogen Dioxide"/)
- character(len=19) `var_nei::current_date`
- character(len=19) `var_nei::mecha`

4.6 source/testsuite/t_check.F90 File Reference

Functions/Subroutines

- program `test_check`

4.6.1 Function/Subroutine Documentation

4.6.1.1 test_check()

```
program test_check
```

4.7 source/testsuite/test_nml.F90 File Reference

Functions/Subroutines

- program `nml_read`
Program to obtain the domain's dimensions.

4.7.1 Function/Subroutine Documentation

4.7.1.1 nml_read()

```
program nml_read
```

Program to obtain the domain's dimensions.

Author

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Date

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