

Data class for Interface.

This class is storing metadata of dimensions, attributes and variables as well as data of variables in an internal data model.

Metadata information must be provided according to NetCDF NCML XML file schema.

Data information can be attached to a variable as numpy array.

Modules

[numpy](#)

Classes

[Attribute](#)
[Dimension](#)
[Variable](#)

class **Attribute**

Class for storing NetCDF attribute information

Methods defined here:

```
__init__(self, name_, type_, value_)  
    Constructor for new attribute.
```

INPUT_PARAMETERS:

```
name          - name of attribute (string)  
type          -  
               type of attribute (string). Valid declarations defined in 'interface_Settings'  
value         - value of attribute (string)
```

```
getName(self)  
    Return attribute name
```

```
getType(self)  
    Return attribute type
```

```
getValue(self)  
    Return attribute value
```

class **Dimension**

Class for storing NetCDF dimension information

Methods defined here:

```
__init__(self, name_, length_, isUnlimited_)  
    Constructor for new dimension.
```

INPUT_PARAMETERS:

```
name          - name of dimension (string)  
length        - length of dimension (integer)  
isUnlimited    - flag if dimension is unlimited (boolean)
```

```
getIsUnlimited(self)  
    Return boolean if dimension is of unlimited lenght
```

```
getLength(self)  
    Return dimension lenght
```

```
getName(self)
    Return dimension name
```

class **Variable**

Class for storing NetCDF variable information

Methods defined here:

```
__init__(self, name_, shape_, type_)
    Constructor for new variable.

    INPUT_PARAMETERS:
    name          - name of variable (string)
    shape         - shape of variable (string). Names of shapes separated by space
    type         -
                  type of variable (string). Valid declarations defined in 'interface_Settings'

addAttribute(self, name_, type_, value_)
    Add attribute to variable by attaching new attribute class to variable attribute list

addData(self, numpy_)
    Attach data to variable as numpy array

getAttributes(self)
    Return list of variable attribute classes

getData(self)
    Return attached data of variable as numpy array

getName(self)
    Return variable name

getShape(self)
    Return variable shape

getType(self)
    Return variable type
```

Data

```
__author__ = 'Nicolai Holzer'
__author_email__ = 'first-name dot last-name @ mailbox.tu-dresden.de'
__date__ = '2011-03-28'
__version__ = 'v0.1.1'
```

Author

Nicolai Holzer