pysiral Documentation

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Getting started

This is the main page for the documentation of the python sea ice radar altimetry (pysiral) toolbox.

Note: This page is work in progress.

CHAPTER 1

Installation

CHAPTER 2

Package Configuration

CHAPTER 3

Input Data

CHAPTER 4

Processing Workflow

CHAPTER 5

Cookbook

CHAPTER 6

Coding Conventions

CHAPTER 7

pysiral

7.1 pysiral package

7.1.1 Subpackages

pysiral.auxdata package

Submodules

pysiral.auxdata.icechart module

pysiral.auxdata.mss module

pysiral.auxdata.region module

pysiral.auxdata.rio module

pysiral.auxdata.sic module

pysiral.auxdata.sitype module

pysiral.auxdata.snow module

Module contents

pysiral.bnfunc package

Submodules

pysiral.bnfunc.cytfmra module

Module contents

plib A collection of python libraries

pysiral.cryosat2 package

Submodules

pysiral.cryosat2.functions module

pysiral.cryosat2.iotools module

pysiral.cryosat2.l1_adapter module

pysiral.cryosat2.l1b_mds_def module

pysiral.cryosat2.l1bfile module

pysiral.cryosat2.preproc module

Module contents

plib A collection of python libraries

pysiral.envisat package

Submodules

pysiral.envisat.functions module

pysiral.envisat.iotools module

pysiral.envisat.l1_adapter module

pysiral.envisat.preproc module

pysiral.envisat.sgdr_mds_def module

pysiral.envisat.sgdrfile module

Module contents

plib A collection of python libraries

pysiral.ers package

Submodules

pysiral.ers.iotools module

pysiral.ers.l1_adapter module

pysiral.ers.preproc module

pysiral.ers.sgdrfile module

Module contents

plib A collection of python libraries

pysiral.esa package

Submodules

pysiral.esa.functions module

pysiral.esa.header module

Module contents

plib A collection of python libraries

pysiral.icesat package

Submodules

pysiral.icesat.glah13 module

pysiral.icesat.iotools module

pysiral.icesat.preproc module

Module contents

plib A collection of python libraries

pysiral.sentinel3 package

Submodules

pysiral.sentinel3.iotools module

pysiral.sentinel3.l1_adapter module

pysiral.sentinel3.preproc module

pysiral.sentinel3.sral_l1b module

Module contents

plib A collection of python libraries

7.1.2 Submodules

pysiral.classifier module

pysiral.clocks module

pysiral.config module

pysiral.datahandler module

pysiral.errorhandler module

Created on Fri Jul 10 15:25:45 2015

@author: Stefan

class pysiral.errorhandler.**ErrorHandler**
Bases: object

Parent class for all Errors (very early development phase)

raise_on_error

test_errors()
Returns True if any error is True, else False

validate()
Check all error states and raise Exception when raise_on_error=True

class pysiral.errorhandler.**ErrorStatus**(*caller_id=''*)
Bases: object

add_error(*code*, *message*)
Add an error. Error code and messages are arbitrary

get_all_messages()

message

raise_on_error()
print error messages and exit program on existing error(s)

reset()
Remove all error messages and set to clean status

class pysiral.errorhandler.**FileIOErrorHandler**
Bases: *pysiral.errorhandler.ErrorHandler*

Error Handler for reading files

file_undefined

format_not_supported

io_failed

pysiral.filter module

pysiral.flag module

pysiral.frb module

pysiral.grid module

pysiral.helper module

pysiral.io_adapter module

pysiral.iotools module

pysiral.l1bdata module

pysiral.l1bpreproc module

pysiral.l1preproc module

pysiral.l2data module

pysiral.l2preproc module

pysiral.l2proc module

pysiral.l3proc module

pysiral.legacy module

pysiral.logging module

pysiral.maptools module

pysiral.mask module

pysiral.orbit module

pysiral.output module

pysiral.path module

pysiral.path.**file_basename**(*filename*, *fullpath=False*)
Returns the filename without file extension of a give filename (or path)

pysiral.path.**filename_from_path**(*path*)

pysiral.path.**folder_from_filename**(*filename*)

pysiral.path.**get_filenames**(*directory*, *file_extension*)
" Parses a directory for certain file extensions and returns a sorted list

Arguments:

directory: str Directory to be searched

file_extension: str: Identifier for file type (e.g. '*.dat')

pysiral.path.**get_module_folder**(*module*)

pysiral.path.**validate_directory**(*folder*)
Check if folder str is a existing folder, creates the folder if `folder` does not exist and is of valid notation Returns status flag (True: valid and existing, False: invalid)

pysiral.proj module

Created on Thu Apr 07 20:02:58 2016

@author: Stefan

class pysiral.proj.**BaseProjection**
Bases: `object`

mpl_projection_keyw

projection_keyw

pysiral.retracker module

pysiral.roi module

pysiral.sit module

pysiral.ssh module

pysiral.surface_type module

pysiral.units module

pysiral.validator module

pysiral.waveform module

7.1.3 Module contents

Python Module Index

p

Index