Package 'cmsaf'

September 27, 2024

Version 3.5.2

Title A Toolbox for CM SAF NetCDF Data

Contact CM SAF Team <contact.cmsaf@dwd.de>

Description The Satellite Application Facility on Climate Monitoring (CM SAF)
is a ground segment of the European Organization for the Exploitation of
Meteorological Satellites (EUMETSAT) and one of EUMETSATs Satellite Application
Facilities. The CM SAF contributes to the sustainable monitoring of the climate
system by providing essential climate variables related to the energy and water
cycle of the atmosphere (<https://www.cmsaf.eu>). It is a joint cooperation of eight
National Meteorological and Hydrological Services.
The 'cmsaf' R-package includes a 'shiny' based interface for an easy application of
the 'cmsafops' and 'cmsafvis' packages - the CM SAF R Toolbox. The Toolbox offers an
easy way to prepare, manipulate, analyse and visualize CM SAF NetCDF formatted data.
Other CF conform NetCDF data with time, longitude and latitude dimension should be
applicable, but there is no guarantee for an error-free application.
CM SAF climate data records are provided for free via (<https://wui.cmsaf.eu/safira>).
Detailed information and test data are provided on the CM SAF webpage
(<http://www.cmsaf.eu/R_toolbox>).

URL https://www.cmsaf.eu

License GPL (>= 3)

BugReports https://github.com/cmsaf/cmsaf-r-tools/issues

Depends R (>= 4.0), cmsafops (>= 1.4.0), cmsafvis (>= 1.2.0)

Imports colourpicker (>= 1.0), colorspace (>= 1.4), FNN (>= 1.1), maps
(>= 3.3), ncdf4 (>= 1.17), R.utils (>= 2.9), raster (>= 3.0),
shiny (>= 1.4), shinyFiles (>= 0.8.0), shinyjs (>= 1.1),
shinythemes (>= 1.1), shinyWidgets (>= 0.6), tcltk (>= 3.5),
data.table, SearchTrees, xml2

NeedsCompilation no

Repository CRAN

Suggests rworldxtra (>= 1.01), spelling (>= 2.1), testthat (>= 2.3)

RoxygenNote 7.3.2

Encoding UTF-8

Language en-US

Maintainer Steffen Kothe <Steffen.Kothe@dwd.de>

Author Steffen Kothe [aut, cre],
Danny Parsons [ctb]

Date/Publication 2024-09-27 15:10:13 UTC

Contents

---

cmsaf-package *cmsaf: A user-friendly Toolbox for preparing, manipulating, analyzing and visualizing satellite-based CM SAF NetCDF formatted data.*

Description

The 'cmsafops' functions are manipulating NetCDF input files and write the result in a separate output file. The functions were designed and tested for CM SAF NetCDF data, but most of the functions can be applied to other NetCDF data, which use the CF convention and time, latitude, longitude dimensions. As interface This package uses functionalities of the cmsafops and cmsafvis packages.

Author(s)

Maintainer: Steffen Kothe <Steffen.Kothe@dwd.de>

Other contributors:

- Danny Parsons <danny@idems.international> [contributor]

See Also

Useful links:

- https://www.cmsaf.eu

- Report bugs at https://github.com/cmsaf/cmsaf-r-tools/issues

---

run_toolbox   *Run the CMSAF R Toolbox.*

Description

Run the interactive shiny-based CM SAF R Toolbox. It uses functions from cmsafops and cmsafvis.

Usage

```
run_toolbox(...)
```

Arguments

...   Arguments to be passed to runApp.

Examples

```
## Not run: run_toolbox(launch.browser = TRUE)
```

Index