



## Overview of the `ecomSUDG.Raccess` package

Since the [R language](#) has been adopted for some key tasks in the EUPORIAS and SPECS projects (including the development of comprehensive validation and statistical-downscaling packages), the `ecomSUDG.Raccess` is envisaged as a user-friendly, R-based interface to the ECOMS User Data Gateway, enabling [authentication?](#) and remote access to the different datasets (seasonal forecasting, observations, reanalysis) currently available. Moreover, `ecomSUDG.Raccess` implements data homogenization (a single vocabulary) and time filtering/aggregation functionality.

The `ecomSUDG.Raccess` package relies on the `rJava` package as an interface to the powerful capabilities of the [Unidata's netCDF Java library](#).

- [Pre-requisites](#)
- [Authentication?](#)
- [Data Homogeneization?](#)
- [Examples?](#)

## Versions

The latest versions (stable and/or devel) can be installed directly from [GitHub](#), but please note that the R package [devtools](#) must be installed.

### Latest stable release 2.1-1 (11 Jul 2014)

[?see what's new](#)

To obtain the latest stable release of the `ecomSUDG.Raccess` package (and the associated dependencies), type the following commands from your R console:

```
devtools::install_github(c("SantanderMetGroup/downscaleR.java@stable", "SantanderMetGroup/ecomSUDG.Raccess@stable"))
```

### Development version

The development version is available at the 'master' branch of the [GitHub repository](#)

**Error: Macro NoteBox(The development version is unstable and may not be functional) failed**

```
list index out of range
```

```
devtools::install_github(c("SantanderMetGroup/downscaleR.java@stable", "SantanderMetGroup/ecomSUDG.Raccess"))
```

### Older versions

#### version 2.1-0 (8 Jul 2014)

- New extended list of available variables
- NCEP reanalysis included in available datasets
- On-the-fly computation of derived variables
- Support for variables with vertical levels and static (e.g. geopotential surface zs)
- New dependency on `downscaleR.java` R package containing Java dependencies
- **version 2.0-0** (16-jun-2014). Includes access to a extended list of surface variables, a new observational gridded dataset WFDEI, and on-the-fly time filtering/aggregation capabilities. New input/output formats.
- **version 1.0-0** (17-feb-2014). Access to a limited list of surface variables for System4 and CFSv2 datasets.