

Wikiprint Book

Title: Global domain selections

Subject: TracMeteo - udg/ecomms/RPackage/examples/globalSelection

Version: 5

Date: 12/02/2021 08:13:50 AM

Table of Contents

Global domain selections

3

Global domain selections

For this example we will load the gridded observational dataset WFDEI (`dataset = "WFDEI"`). In particular, we will load the near-surface atmospheric pressure (`var = ps`) for all land areas globally in boreal winter (DJF, `season = c(12,1,2)`) for the year 2010 (`years = 2010`). Note that, for full spatial domain requests, arguments `lonLim` and `latLim` are set to `NULL` (the default, which is equivalent to just omitting both arguments).

```
> ex.global <- loadECOMS(dataset = "WFDEI", var = "ps", lonLim = NULL, latLim = NULL, season = c(12,1,2), years = 2001)
[2014-06-17 13:18:14] Defining homogeneization parameters for variable "ps"
[2014-06-17 13:19:45] Defining geo-location parameters
[2014-06-17 13:19:45] Defining time selection parameters
[2014-06-17 13:19:58] Done
> print(object.size(ex.global), units = "Mb")
178 Mb
```

Note that, unlike the [?previous examples](#), we have omitted the `leadMonth` and `members` arguments, as this is not a forecast dataset, but a gridded observational dataset lacking the initialization and ensemble dimensions. If any of this arguments is specified when loading `WFDEI` or any other non-forecast dataset, they will be simply ignored (originating a note on screen).

```
> ps.mean <- apply(ex.global$Data, FUN = mean, MAR = c(1,2))
> x <- ex.global$xyCoords$x
> y <- ex.global$xyCoords$y
> # Requires library 'fields'. Please install if not present to reproduce the example
> library(fields)
> image.plot(x,y, ps.mean, asp = 1, main = "Mean DJF surface pressure 2001" )
```

Mean DJF surface pressure 2001

