

## **Wikiprint Book**

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In the next lines we describe an illustrative example considering SYSTEM4, one-month lead time forecasts of minimum surface temperature for January over a window centered in Europe (0°W - 30°E and 35°S - 65°N). A more elaborated example describing a multi-model selection of a similar dataset is presented in the tutorial, which can be downloaded [?here](#).

The request is simply formulated via the `loadSystem4` function in the following way:

```
> ds <- "http://www.meteo.unican.es/tds5/dodsC/system4/System4_Seasonal_15Members.ncml";
> openDAP.query <- loadSystem4(dataset = ds, var = "tasmin", members = 1,
+   lonLim = c(0,30), latLim = c(35,65),
+   season = 1, years = 1981:2000, leadMonth = 1)
```

The function arguments are the next described:

- `dataset`: A character string indicating the full URL path to the OPeNDAP dataset. Currently, the accepted values correspond to the System4 datasets described in Sec. [s.thredds](#), as specified in the above example, but using `\texttt{System4_Seasonal_15Members.ncml}`, `\texttt{System4_Seasonal_51Members.ncml}`, or `\texttt{System4_Annual_15Members.ncml}` ending strings.

`\item \texttt{var}`: Variable code. Currently `\texttt{tas}`, `\texttt{tasmin}`, `\texttt{tasmax}`, `\texttt{pr}`, `\texttt{mslp}`, as internally defined in the dictionary defined for System4 following the nomenclature displayed in Table [t.dictionary](#), although new variables and datasets will be soon included. `\item \texttt{members}`: Optional. Default to all members. In the above case, a single member (the first) of the System4 ensemble is loaded, but additional members could be also specified (e.g. `\texttt{members=NULL}` for all members, or `\texttt{members=1:5}` for the first five members). `\item \texttt{lonLim}`: Vector of length = 2, with minimum and maximum longitude coordinates, in decimal degrees, of the bounding box selected. `\item \texttt{latLim}`: Vector of length = 2, with minimum and maximum latitude coordinates, in decimal degrees, of the bounding box selected. `\item \texttt{season}`: A vector of integers specifying the desired season (*in months, January=1, etc.*) of analysis. Options include a single month (as in the above example) or a standard season (e.g. `\texttt{period = c(12,1,2)}` for standard Boreal winter, DJF). `\item \texttt{years}`: Optional. Default to all available years. Vector of years to select. Note that in cases with year-crossing seasons (e.g. winter DJF, `\texttt{season = c(12,1,2)}`), for a particular year period `\texttt{years = 1981:2000}`), by convention the first season would be DJF 1980/81, if available (otherwise a warning message is given). `\item \texttt{leadMonth}`: Lead month forecast time corresponding to the first month of the specified season. Note that `\texttt{leadMonth = 1}` for `\texttt{season = 1}` (January) correspond to the December initialization forecasts. In this way the effect of the lead time forecast in the analysis of a particular season can be analyzed by just changing this parameter. `\end{itemize}`

The result of the function is a data structure with all the requested information as follows.