

7th of November, 2019
Aula de formació Room
R developments meeting

Organizers: An-Chi Ho & Núria Pérez-Zanón

Attendees: Suso, Arthur, Andrea, Veronica, Jaume, Louis-Philippe, Llorenç, Marga, Nicola, Bala, Deborah, Vladimir, Aude

Agenda:

1. News

Slides here

https://earth.bsc.es/wiki/lib/exe/fetch.php?media=tools:rtools_user_meeting_20191107.pdf

- Framework presentation
- Tools updates: CStools, ClimProjDiags, startR and s2dverification

2. Discussion

- Roadmap (last edit in September) + frequently used s2dv functions
 - Doubts:
 - i. Regrid with default of extra_cells = 2?
 - ii. Histo2Hindcast parameters?
 - Choose the package to which your development belongs^{*,**}:
 - i. functions to compute indices may be included in ClimProjDiags:
(i.e.: WeatherRegims (Vero), Capacity Factor (Llorenç), Drought index (Bala), ...)
 - ii. functions to be used in Climate Services (from postprocessing to plotting tools) may be included in CStools
(i.e.: PlotMostLikelyQuantileMap (Vero), Plot_ods (Llorenç), ...)
 - iii. functions to handle, format and verify seasonal to decadal forecast may be included in s2dverification
(i.e.: Adjustments to score functions (Vero), nc2ts (Llorenç), ...)
- ^{*}fuzzy borders between packages
^{**} provide the development (using multiApply if possible) with documentation and ~10 examples

Minutes:

- Roadmap: About the future compatibility break of s2dverification, because s2dverification is used in some experiments as a routine, the compatibility break may cause problems (or may not, we don't know yet). One consideration is to create the new package (probably called 's2dv') and keep s2dverification as it is now, so we can avoid the potential problems. Since the development is still at the starting point, we have time to think about it and may have further discussion in the future.
- Doubts
 - Regrid with default of extra_cells = 2?
Since the change is better in interpolation and also can be consistent with Load() and cdo, we should change the default value of transform_extra_cells to 2.
 - Histo2Hindcast parameters?
For now, not many people use this function, and no one requires the development. We won't work on it for now until the requirement is raised.

- Choose the package to which your development belongs

Requirements for a new development to be included are: has documentation, use Apply and provide 10 examples.

For some colleagues, the indices that are not computed from essential climate variables, e.g. teleconnexions, seems to not feet in ClimProjDiags package. Then, Llorenç suggested to create a new package for General Circulation Patterns and Teleconnexions. Núria and LP had doubts about the benefits of creating a new package. CStools is catching the attention of the community (it is being presented in many events) while ClimProjDiags is an in-house package that can be released at any moment. That's way each package offers different benefits. For instance, CStools will contain multiEOFs and Ensemble Cluster method in the next release. The authors of these functions expressed their interest of publish their functions shortly.