



**Barcelona  
Supercomputing  
Center**

*Centro Nacional de Supercomputación*



# s2dverification

Update meeting – 03/03/2016

Mailing list:

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Wiki:

<https://earth.bsc.es/wiki/doku.php?id=tools:s2dverification>



- Current state
- Features in testing phase
- Paper to JSS
- Vignettes
- Issues and comments
- Useful links

- Latest release: s2dverification 2.5.0
  - Also available on CRAN.
  - Can now specify paths to NetCDF masks in Load():

```
mask_exp <- list(path = '/path/to/mask_exp.nc')
mask_obs <- list(path = '/path/to/mask_obs.nc')
data <- Load(exp = c('expA', 'expB'), obs = c('obsX'),
             maskmod = list(mask_exp, mask_exp),
             maskobs = list(mask_obs), .....
```

- Can now Load() data without a configuration file:

```
expA <- list(name = 'expA',
             path = '/path/to/experiments/$EXP_NAME$/
             $STORE_FREQ$_mean/$VAR_NAME$/
             $VAR_NAME$_$START_DATE$.nc')
data <- Load(exp = list(expA), obs = NULL, sdates = ...)
```

# Features in testing phase



Branch name	Pending testers	Deadline
develop-interfacing-SpecsVerification	Omar	2016-01-01
develop-trend	Chloé	2016-01-01
develop-toymodel	Eleftheria	2016-01-01
develop-AnimVSLTime	Chloé, Eleftheria, Omar	2016-01-01
develop-Clusters	François	2016-03-18
develop-FieldProject	LP	2016-03-18
develop-EOF	LP	2016-03-18
develop-NAO	LP	2016-03-18
develop-PlotBox	LP	2016-03-18
develop-RMSE_boot	Chloé, Omar	2016-06-01
develop-SealceModes	François, ???	2016-06-01
develop-AreaWeights	Chloé, ???	2016-06-01
BoxesStereomap	Neven, Chloé	2016-06-01
develop-PlotClim	Nico, Valentina	2016-06-01

■ Stuck at the developer's side

- All new functions explained in the paper will be included in the release v2.6.0 to CRAN.
- Sections pending **to write**:
  - Examples (Valentina)
  - Statistical forecasting (LP + Omar?)
  - Abstract and Conclusion (Nico)
  - State-of-art and technical aspects (Nico)
- Responsibles of each section have **to review** comments and suggestions.
- **Deadline: 2016-03-11.**

- To be reviewed before 2016-03-17:
  - Overview: LP
  - Data retrieval: LP
  - Statistics: Javi, Neven
  - Visualisation: François
  - Example: Valentina
  - Tutorial: Chloé

- Towards s2dverification v3.0.0 – s2dv v3.0.0
  - A compatibility break will happen at approx. July 2016.
  - The name of the new version will change to 's2dv'.
  - Both packages will be available simultaneously in the machines.
  - Can now switch versions with:

```
#!/bin/bash

# Old version
module load s2dverification/2.4.6-foss-2015a-R-3.2.0

# New version
module load s2dverification/2.5.0-foss-2015a-R-3.2.0
```

- No need, by now, to specify version in your scripts.

- Do not use testRR() in 'eigentechniques'.
  - Use 'SpecsVerification' (doesn't account for ENO) or 'psych' (does account for ENO).
- Ongoing developments:
  - Nicola explained his developments to compute skill scores on big arrays ( $> 2\text{GB}$ ) with a time of  $T/N$ , where  $T$  is the computing time spent to compute that score on 1 core and  $N$  is the number of available cores.



- How to develop in s2dverification

<https://earth.bsc.es/wiki/doku.php?id=tools:s2dverification#development>

- GitLab

<https://earth.bsc.es/gitlab/s2dverification>

- Script to test or try features in development

</shared/earth/software/scripts/test-s2dverification> feature

- Script to upgrade configuration files (v2.4.6 → ≥ v2.4.7)

</shared/earth/software/scripts/convertConfig.R> file.conf



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EXCELENCIA  
SEVERO  
OCHOA

Thanks for your attention

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