# s2dverification

Update meeting – 30/11/2015 Sprint review

Mailing list: s2dverification@bsc.es

Wiki:

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

## Outline

- Current state
- Ready to test features
- Issues and comments
- Using Load() + subsetting
- Useful links

#### Current state

- Latest release: s2dverification 2.4.10
  - Available internally only (2.4.0 on CRAN).
  - Bugs in 2.4.7, 2.4.8 and 2.4.9 now corrected.
  - News in Load() since 2.4.6:
    - Efficient manipulation of subsets (faster).
    - Avoids remapping when possible (faster).
    - Now possible to work without a configuration file.
    - Simplified configuration files, can upgrade with /shared/earth/software/scripts/convertConfig.R
    - Provides plenty of metadata.
    - Improved progress information.
    - ... (see changelog on wiki).

## Ready to test features

Branch name	Assigned testers
develop-trend	François, Chloé
develop-seaicemodesetc	Already tested. Depends on develop-trend.
develop-Plotwind	Verónica, Eleftheria
develop-composite	Chloé, Verónica
develop-crpss	Omar (should we discard? We need to ask to Veronica).
develop-toymodel	François,Eleftheria
develop-animVSLtime	Chloé, Eleftheria, Omar: one remains!
develop-interfacing-SpecsVerification	Verónica, Omar
develop-StatTC	François, Javier
develop-RMSE_boot	Chloé, Omar (Omar: not ready to be tested)

Virginie: we should start setting deadlines for each feature.

To be used and tested by everyone.

- Bugs in 2.4.7, 2.4.8 and 2.4.9:
  - Issues when loading data across Greenwich.
  - Data shift or shear in some cases when loading multiple datasets.
  - To restore the latest version if you are using 'uses2dverification':
    - /shared/earth/software/scripts/use-s2dverification default
  - See 'Current state' for enhancements since 2.4.6.

- Towards s2dverification 3.0.0
  - Compatibility break must happen anytime soon.
  - It will affect you in the following aspects:
    - Some function names will change.

```
E.g.: Consist_Trend() → ConsistTrend()
```

E.g.: Filter()  $\rightarrow$  Foo() (the name is not chosen yet)

Some data structures will change.

```
E.g.: var <- Load(....)
var$mod → var$Data$exp
```

Some functions will disappear.

```
E.g.: CRPS()
```

When should it happen? In one month's time, in a year's time, ...? All: It can happen any time as long as we can go back to an old version.

- Remember to share your configuration files
  - Clone the Git repository.
  - Create a branch.
  - Create a merge request.
  - See steps on wiki in 'Development'.
- Ongoing developments
  - Nicola's developments to compute scores over a network of stations.
  - Any other ongoing developments?

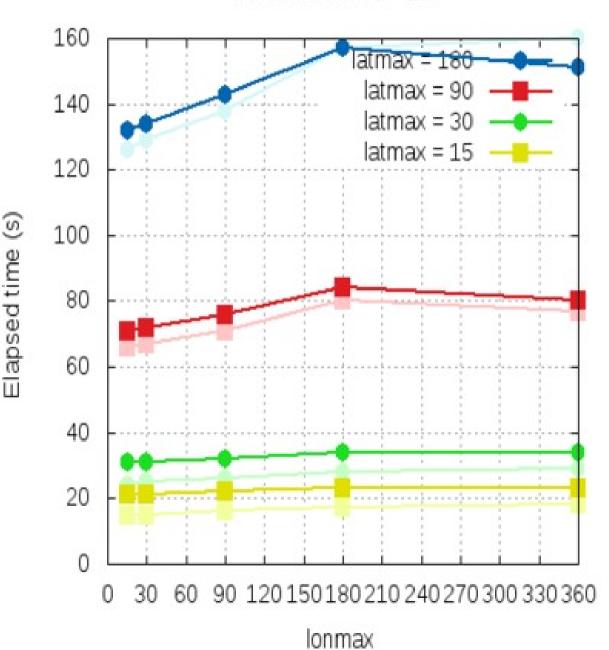
- Other issues or comments?
  - Martin: Load() can't handle data on irregular grids, even if you are asking for an area average.
  - Eleftheria: CDO could calculate global means of data on irregular grids, Load() could use it.
  - François: We should investigate how remapping into a common grid can affect the scores.

#### N. of leadtimes = 124

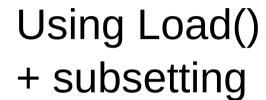
# Using Load() + subsetting

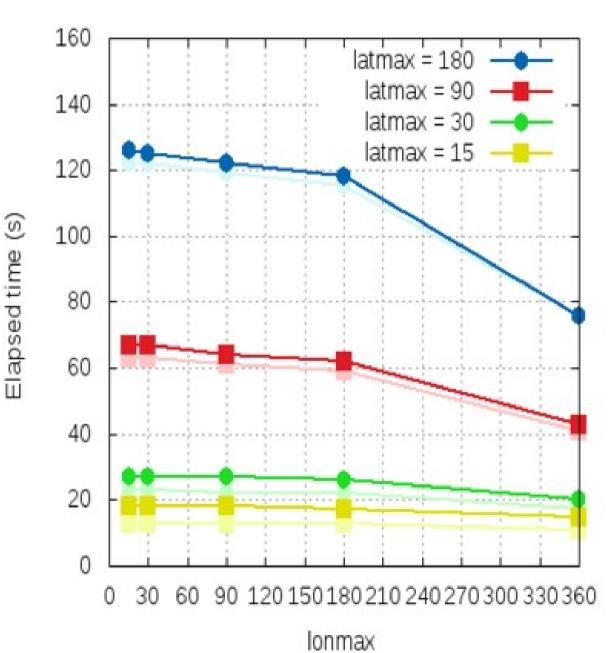
Bold lines show tests performed against file server.

Light lines show tests performed against a THREDDS server.



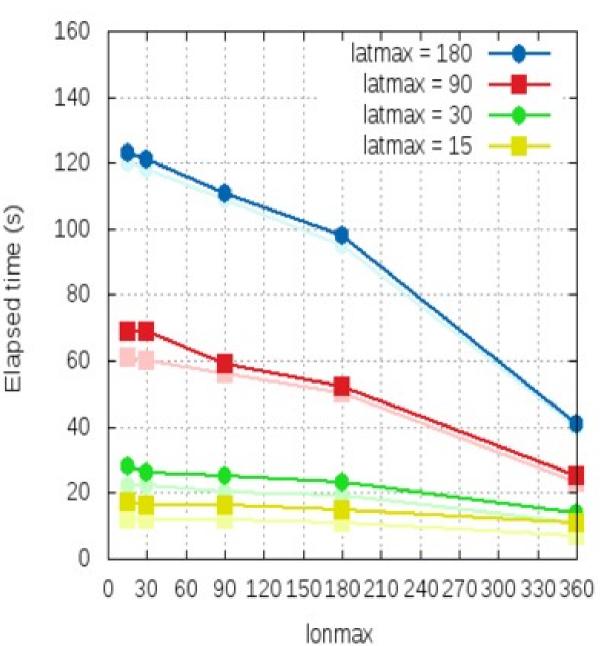
#### N. of leadtimes = 62











### Useful links

- 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 /shared/earth/software/scripts/test-s2dverification feature
- Script to switch default s2dverification version /shared/earth/software/scripts/use-s2dverification version
- Script to upgrade configuration files (v2.4.6  $\rightarrow$   $\geq$  v2.4.7) /shared/earth/software/scripts/convertConfig.R file.conf

# Thanks for your attention

nicolau.manubens@bsc.es