

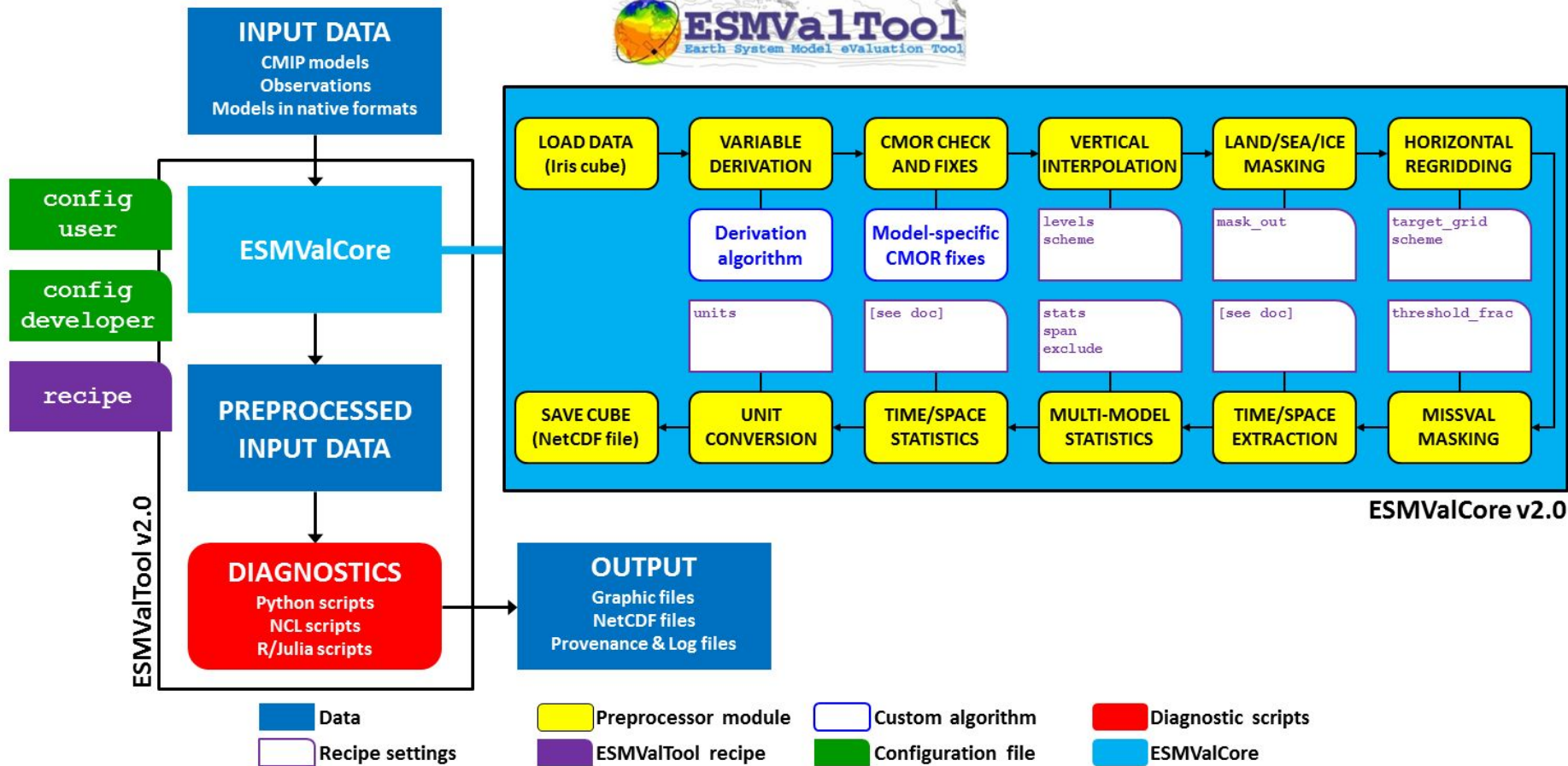


## NorESM User Workshop 2020

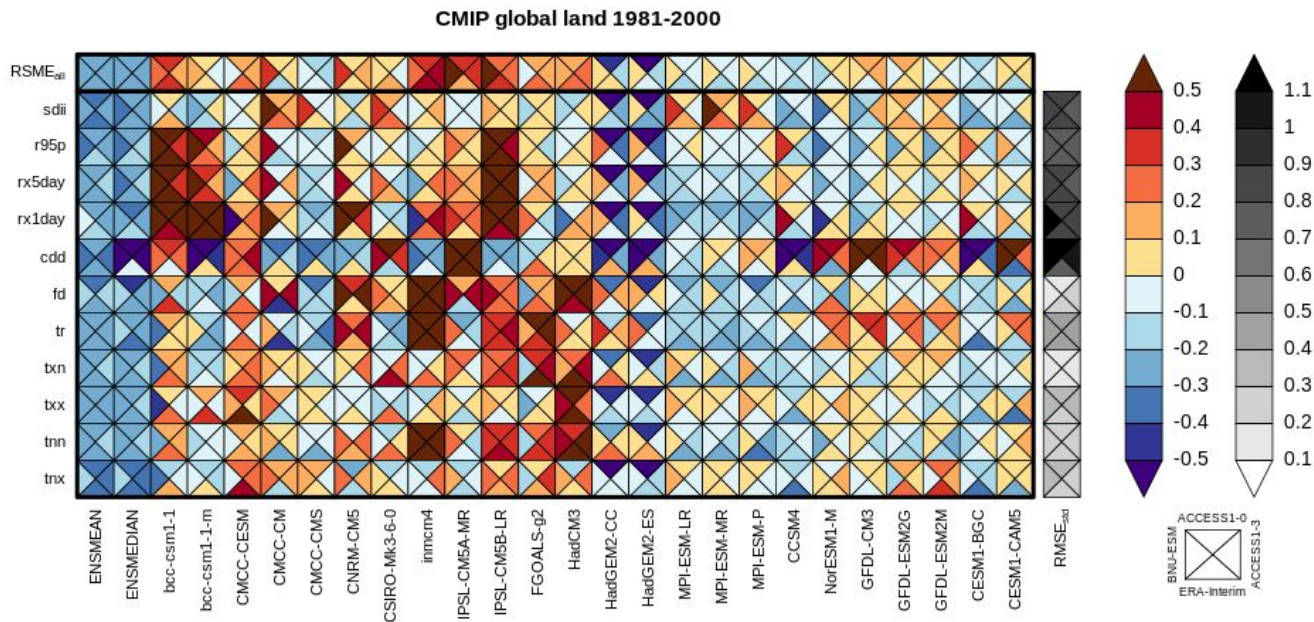
# Why use ESMValTool?

1. Create CF/CMOR compliant datasets (CMOR-ization)
  - a. Standard format for several projects (CMIP, obs4mips, ana4mips, CCMI, CCMVal, AEROCOM, etc.)
2. Standardize multi-model evaluation
  - a. Single model evaluation of different versions
  - b. Compare model output to observations
3. Multi-language support: python, NCL, R, Julia
  - a. Core functions, ESMValCore, written in python
  - b. Built on Iris cube data structures





# Multi-model comparison



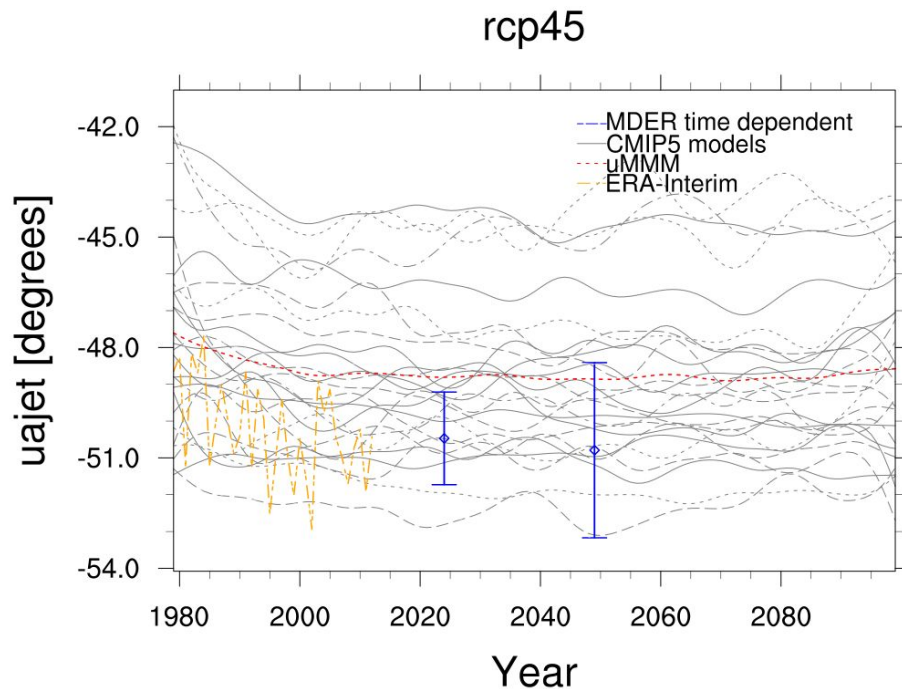
Extreme event indices : CMIP5 temperature & precipitation

ESMValTool gallery:

<https://docs.esmvaltool.org/en/latest/gallery.html>

NorESM User Workshop 2020

# Compare models with reanalysis data



ESMValTool gallery:

<https://docs.esmvaltool.org/en/latest/gallery.html>

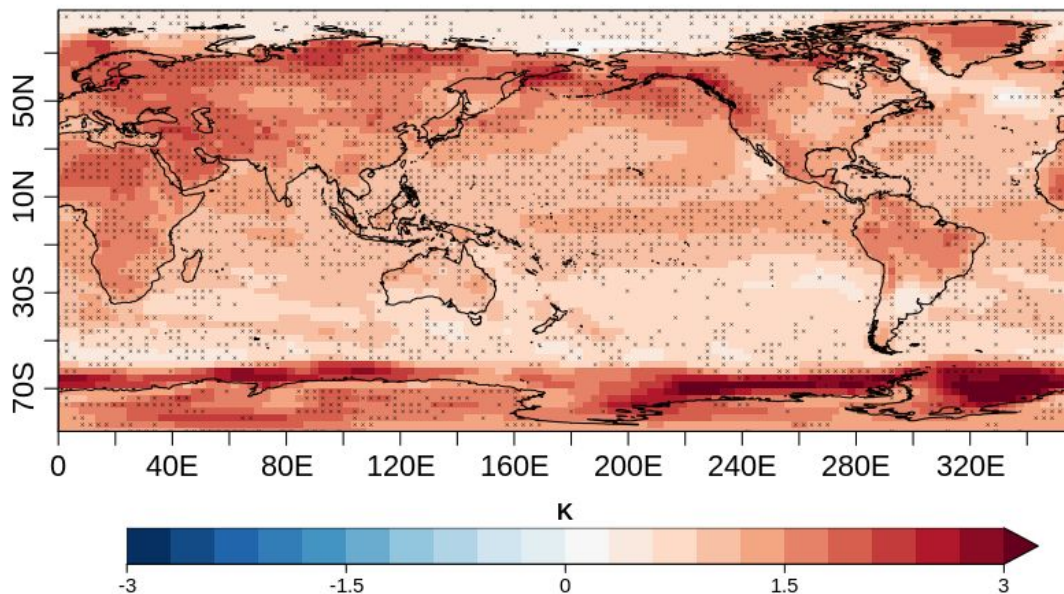
Future austral jet position in RCP4.5 scenario

NORESM User Workshop 2020



# Multi-model products

**JUN tas anomaly (2006-2099) - (1961-1990)**



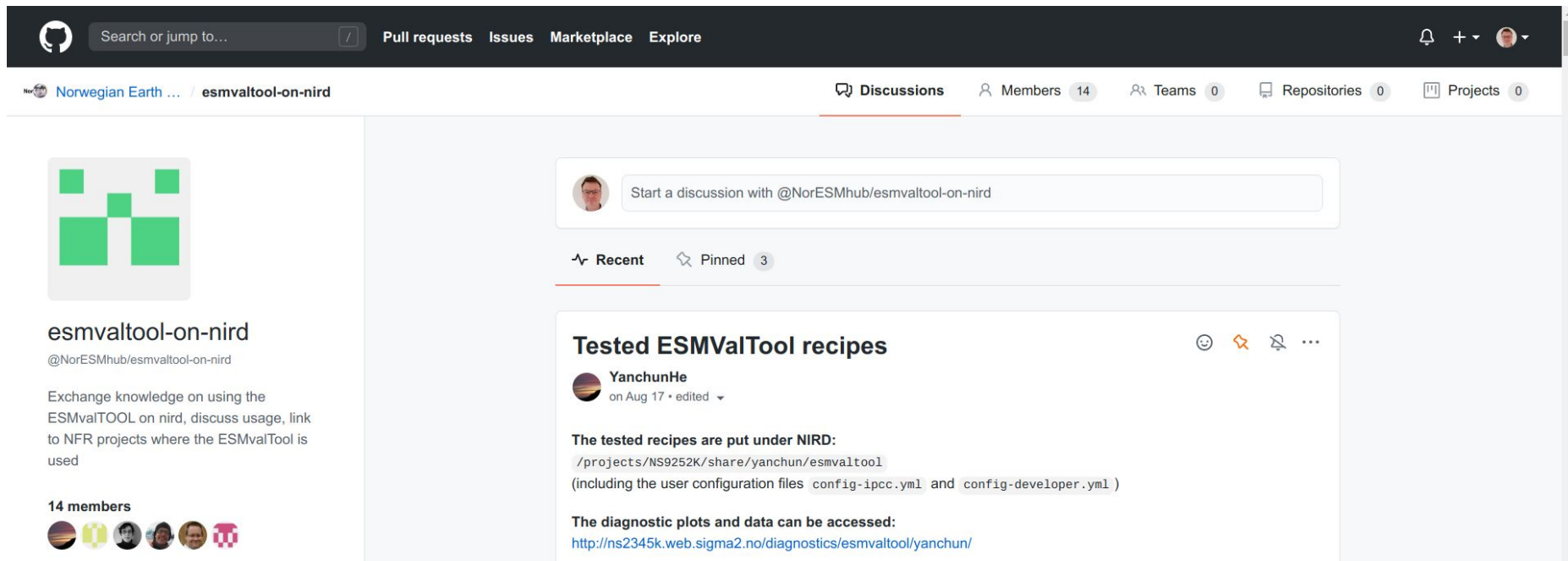
**Multi-model mean anomaly of 2-m air temperature**

ESMValTool gallery:

<https://docs.esmvaltool.org/en/latest/gallery.html>

NorESM User Workshop 2020

# NorESMhub user forum for ESMValTool



The screenshot shows the GitHub interface for the repository `esmvaltool-on-nird` under the organization `NorESMhub`. The top navigation bar includes links for Pull requests, Issues, Marketplace, and Explore. The repository page features a sidebar with the repository name, a description: "Exchange knowledge on using the ESMvalTOOL on nird, discuss usage, link to NFR projects where the ESMvalTool is used", and a list of 14 members. The main content area displays a "Discussions" tab with a search bar and a list of discussions. The first discussion, titled "Tested ESMValTool recipes", is by user YanchunHe and dated August 17. It includes the text: "The tested recipes are put under NIRD: /projects/NS9252K/share/yanchun/esmvaltool (including the user configuration files config-ipcc.yml and config-developer.yml)" and "The diagnostic plots and data can be accessed: http://ns2345k.web.sigma2.no/diagnostics/esmvaltool/yanchun/".

Search or jump to... Pull requests Issues Marketplace Explore

NorESMhub / esmvaltool-on-nird

Discussions Members 14 Teams 0 Repositories 0 Projects 0

esmvaltool-on-nird  
@NorESMhub/esmvaltool-on-nird

Exchange knowledge on using the ESMvalTOOL on nird, discuss usage, link to NFR projects where the ESMvalTool is used

14 members

Start a discussion with @NorESMhub/esmvaltool-on-nird

Recent Pinned 3

**Tested ESMValTool recipes**

YanchunHe  
on Aug 17 • edited

The tested recipes are put under NIRD:  
/projects/NS9252K/share/yanchun/esmvaltool  
(including the user configuration files config-ipcc.yml and config-developer.yml)

The diagnostic plots and data can be accessed:  
<http://ns2345k.web.sigma2.no/diagnostics/esmvaltool/yanchun/>

<https://github.com/orgs/NorESMhub/teams/esmvaltool-on-nird>

# Links to more information

- ESMValTool on gitHub: <https://github.com/ESMValGroup/ESMValTool>
- ESMValCore on gitHub: <https://github.com/ESMValGroup/ESMValCore>
- ESMValTool documentation: <https://docs.esmvaltool.org/en/latest/>
- ESMValTool official tutorial:  
[https://esmvalgroup.github.io/ESMValTool\\_Tutorial/](https://esmvalgroup.github.io/ESMValTool_Tutorial/)
- NorESMhub discussion forum on ESMValTool; running ESMValTool on Nird:  
<https://github.com/orgs/NorESMhub/teams/esmvaltool-on-nird>