3rd Jack Eddy Symposium
WG Interconnection of Sun and Climate

- Why?
  - There are 40+ (or more) climate models. Most models use similar solar inputs, such as TSI, SSI, Ap, Kp, etc and generate similar outputs (toz, tas, ...). To study the Sun-climate interconnection, for example, very common tools such as lag-correlation analysis, multiple linear regression, etc., are often used but different research groups develop different codes for the same analysis but in some occasions, different results, and hence interpretations, are obtained, which are often desirable and unnecessary.
- Overarching goal
  - We aim develop a repository to archive the post-processed observations and model outputs (e.g. climate indices such as ENSO and QBO, climate variables such as surface temperature and stratospheric humidity/ozone) and the programming codes used in the post-processing and the diagnostics (e.g. lag-correlation analysis and Taylor diagrams), so as to avoid unnecessary debates on the methods and have more time on the science.
- Deliverables
  - The repository will be a part of a Sun-Climate Data Institute, which will manage and distribute the repository to collaborators. The proposed budget of the Sun-Climate Data Institute is ~1M USD

Current Team Members (as of June 9, 2022)

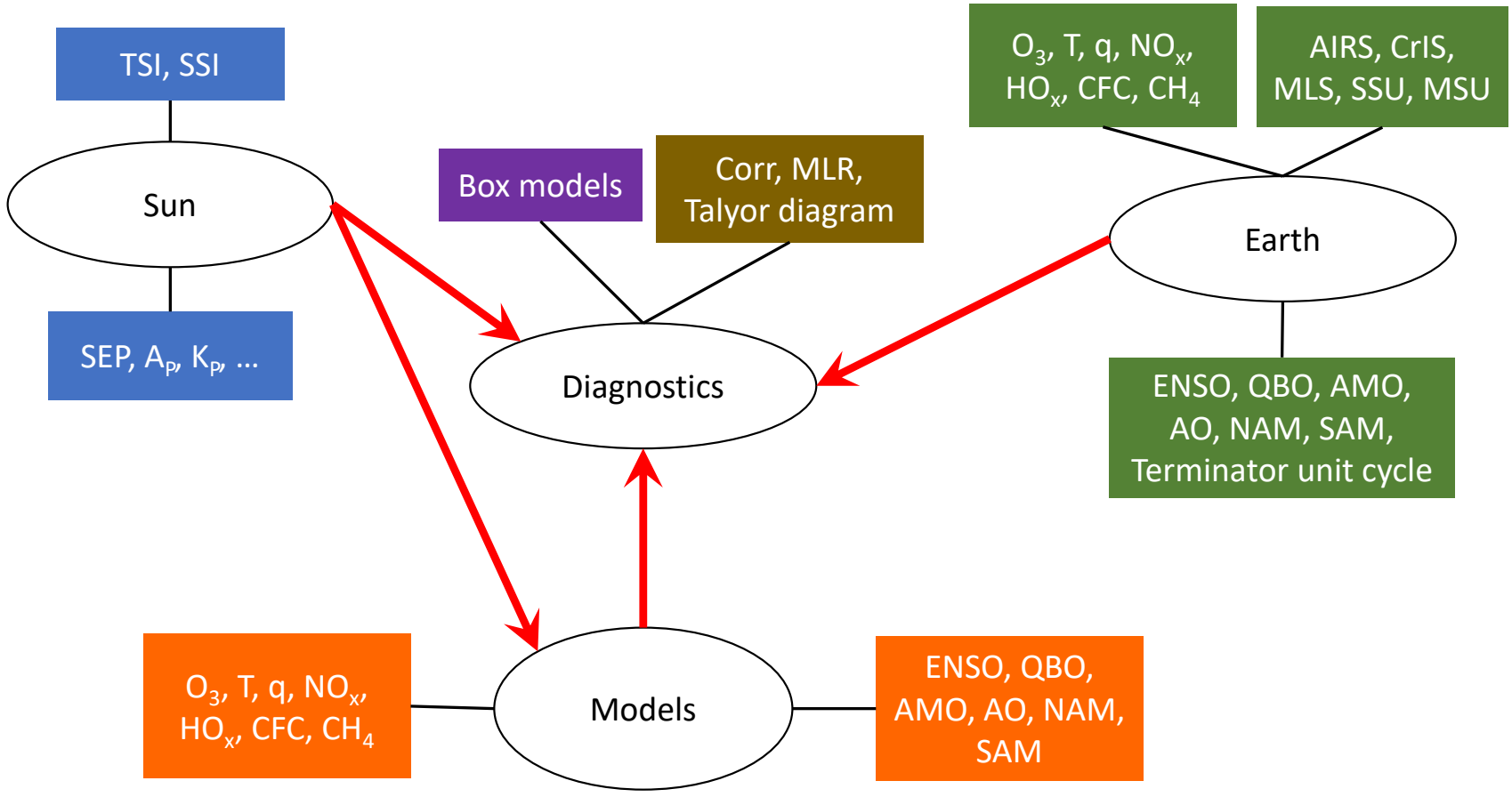
(In the alphabetical order of the last names)

- Alexa J. Halford (NASA GFSC)
- Robert J. Leamon (NASA GSFC)
- King-Fai Li (UC Riverside)
- Daniel R. Marsh (NCAR, U Leeds)
- Andrés Muñoz-Jaramillo (SwRI)
- Gavin A. Schmidt (NASA GISS)

Sun-Climate Data Institute -- Repo structure

Color legends

- Model inputs
- Model-derived data
- Targets/obs
- Mechanisms
- Benchmarking
- Notebooks



Next steps after the 3rd Jack Eddy Symposium

- Keep in touch on Slack
- Keep submitting programming codes to GitHub
- Continue to seek ways to archive necessary post-processed data on GitHub while not exhausting the disk space limit.
- Regularly meet to propose a data institute and outline the tasks and the required infrastructure for the institute