

## Community Call: Software Standards

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Leading the next generation Data Lancaster

- Statistical software production has boomed in recent years
- Users want to know what is "good" statistical software
- We are NOT software developers ...
- ... but coding literacy is increasing
- Standards set expectations and keep the community honest





- · Editors-in-chief pre-screen all papers and software
- We use a set of standards around usability and convention
- Guidance to authors is:
  - Readable and have comments
  - Where possible, formatted help files and packaged code
  - Where possible, available from standard repositories
  - · Where sensible, leverage classes and methods
  - Link to rOpenSci standards, but not mandatory
- After pre-screening the submission is sent to reviewers who have their own standards



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- · Covers both time-domain and frequency-domain software
- Additional constraints for time series data
  - preserving ordering indices
  - missing data handling
  - assumption handling (stationarity)
  - forecasting specifics including distributions
  - return values transformations
  - visualisations frequency axes