

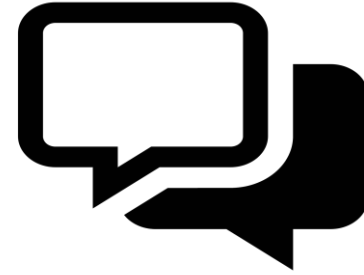
Organization and Planning of Scientific Research

ZHIDEBEKKYZY AKNUR
PHD, ASSOCIATE PROFESSOR

Lecture 8. Tables and figures

- Discussion
- Examples
- Tips for data visualization

Review – Q&A



Why do we need to review the literature first?

Should we separate local and foreign authors?

“You can skip/omit the purpose of the paper in the Introduction section”. Do you agree with this statement? Why?

Explain the structure of an introduction

What is the hypothesis?

What is the stand-alone literature review?

What is an embedded literature review?

Which part of the scientific manuscript resembles a recipe?

Can we use the passive voice in the Methodology part?

Which tense will you use in describing the steps you took in doing certain research?

Structure of a research article

Abstract

▶ **IMRAD**

Introduction

▶ Abstract

Literature review / Theoretical background

▶ Introduction

Methodology

▶ **M**aterials and methods

Results / research findings

▶ **R**esults and

Discussion

▶ **D**iscussion / **C**onclusion

Conclusion

▶ Acknowledgements

Acknowledgements

▶ References

References

Examples →→→



1. Scope
2. Topic
3. Literature review (draft)
4. Research gap
5. Research plan (draft for future Methodology)
6. Research processes
7. Collecting data/information / Getting results
8. Analysis / interpretation / systemizing
9. Preparation for writing

Drafts and data

1. Tables and figures
2. Results
3. Methods
4. Discussion
5. Introduction / Literature review
6. Conclusion
7. Abstract
8. Other parts: title, keywords, references, acknowledgments, information about authors, contributions, etc.

Article

First thing you should do is to sort out your data and decide how you are going to present them

Год ↓ Документы ↑

2020	242
2019	305
2018	191
2017	187
2016	100
2015	73
2014	39
2013	16
2012	13
2011	12

Документы по годам

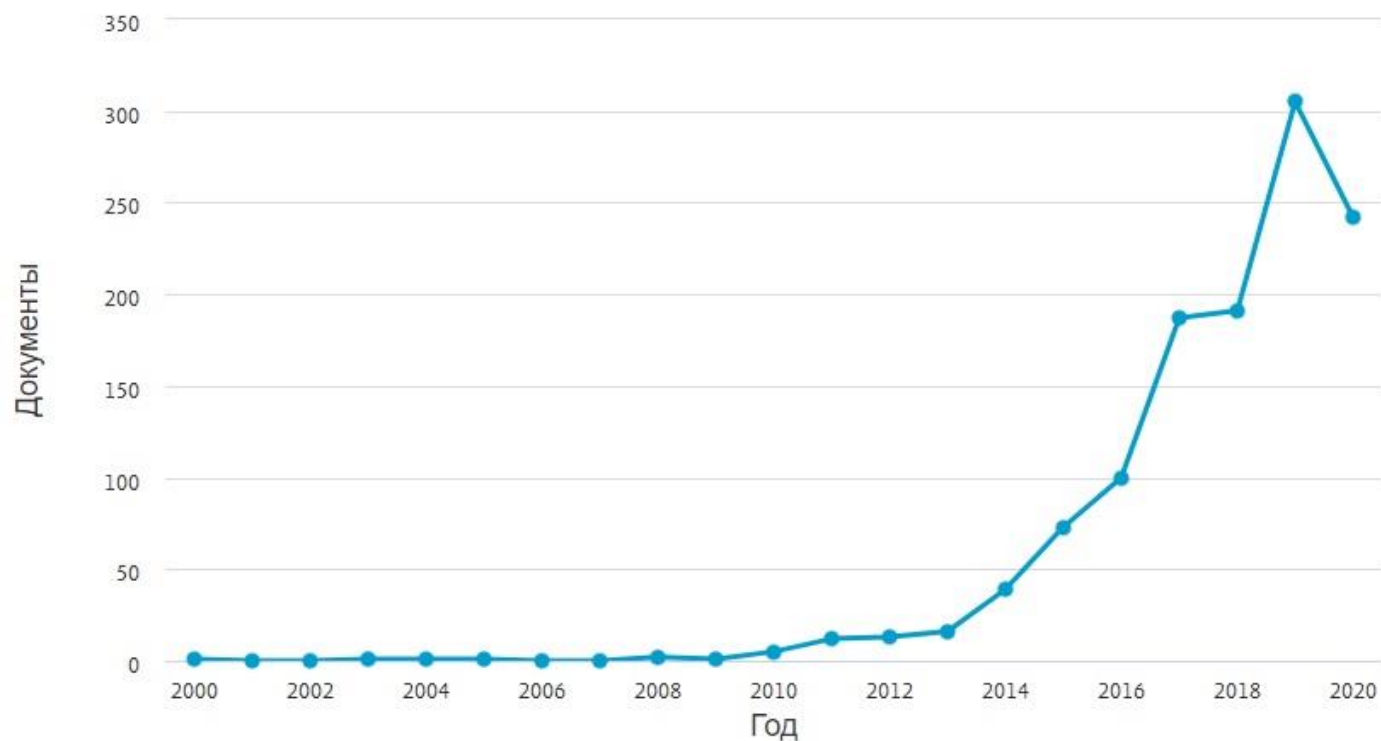


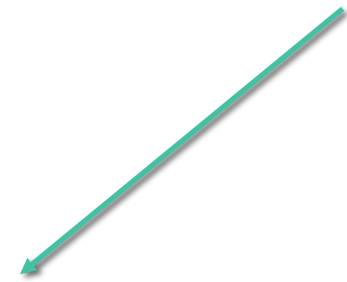
Table 1

The distribution of interview and survey respondents by industry, organizational level and professional status.

	The interviewees (N = 30)	The survey respondents (N = 294)
Industry		
Manufacturing industry	57%	48%
Wholesale and retail	32%	37%
Construction	7%	10%
Logistics	4%	5%
Organizational level of respondent		
Corporate	50%	34%
Business Unit	30%	40%
Facility/factory/outlet/construction site	20%	26%
Professional status		
General Management	20%	42%
Purchasing	7%	15%
EHS	60%	18%
Business development	3%	18%
Real estate management	10%	7%



So-called rule of three horizontal lines



Additional tips

Tables and figures are the foundation of your story. Editors, reviewers and readers may look first at title, abstract, and tables and figures!

Do not use the same data in both a figure and a table

Figures → visual impact / show trends and patterns / highlight a particular result

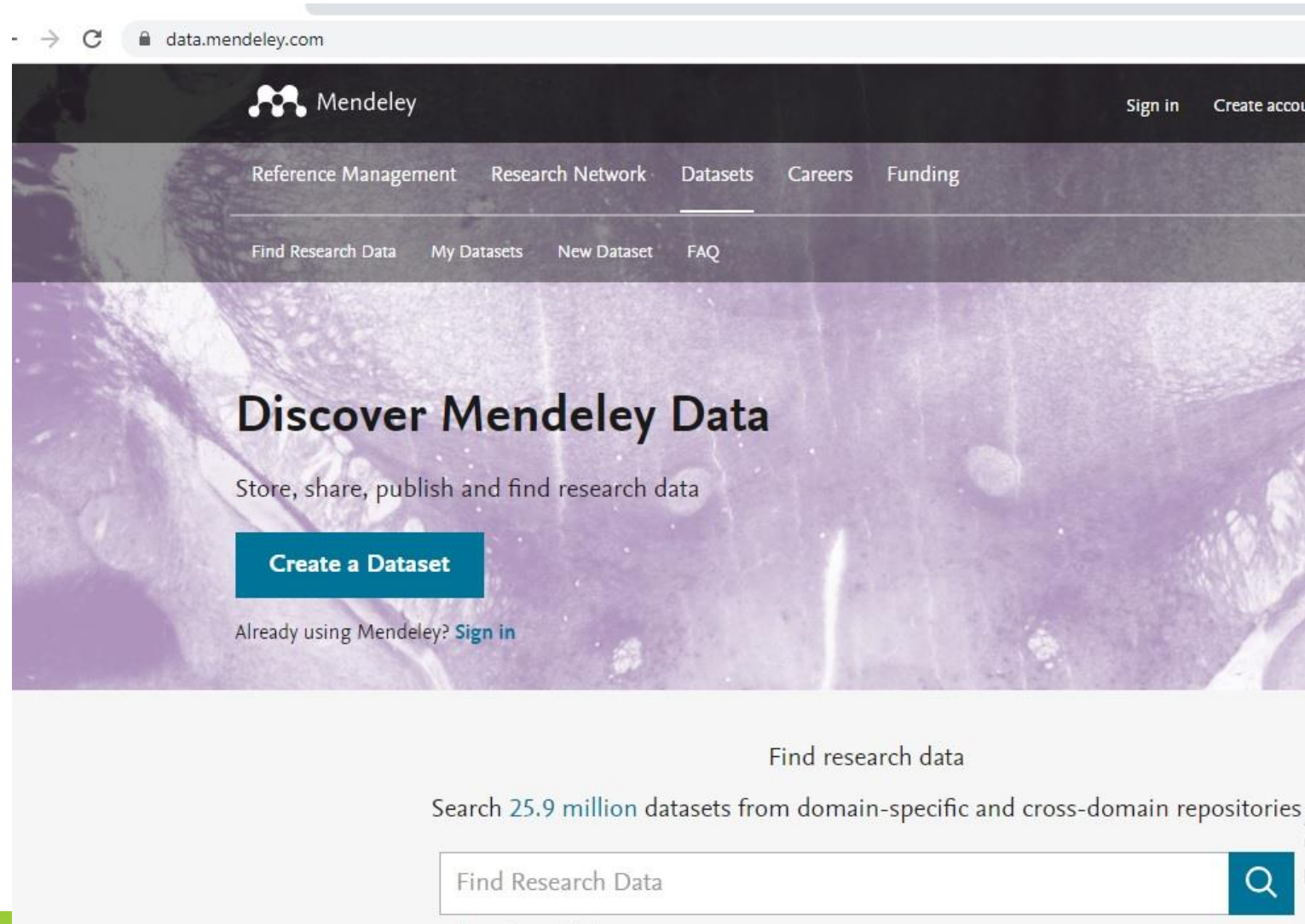
Tables → give precise values / display many values and variables

Think carefully about titles for tables and figures. Keep it simple, informative and relevant to the content

If you have big amount of data/calculations, put them into supplementary material section or annexes

Check the formatting styles on the web-site of the target journal

https://data.mendeley.com/



The screenshot shows the Mendeley Data website homepage. At the top, there is a navigation bar with the Mendeley logo and links for "Sign in" and "Create account". Below this is a secondary navigation bar with links for "Reference Management", "Research Network", "Datasets", "Careers", and "Funding". A third navigation bar contains links for "Find Research Data", "My Datasets", "New Dataset", and "FAQ". The main content area features a large purple-tinted background image of a biological specimen. The headline "Discover Mendeley Data" is prominently displayed, followed by the tagline "Store, share, publish and find research data". A teal button labeled "Create a Dataset" is positioned below the tagline. Underneath the button, it says "Already using Mendeley? Sign in". At the bottom of the page, there is a search section titled "Find research data" with the text "Search 25.9 million datasets from domain-specific and cross-domain repositories". A search input field contains the text "Find Research Data" and a magnifying glass icon to its right.

data.mendeley.com

Mendeley Sign in Create account

Reference Management Research Network Datasets Careers Funding

Find Research Data My Datasets New Dataset FAQ

Discover Mendeley Data

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Find research data

Search 25.9 million datasets from domain-specific and cross-domain repositories

Find Research Data

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Econometric modelling of climate x +
sciencedirect.com/science/article/pii/S0304407619301162#mmc1

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Estimates of both the human impact on climate as well as the economic impacts of climate change are crucial to inform policy decisions. Econometric modelling allows us to quantify these impacts and their uncertainties, but models have to be consistent with the underlying physics and the time series properties of the data. Here I show that energy-balance models of climate are equivalent to an econometric cointegrated system and can be estimated in discrete time. This equivalence provides a basis for the use of cointegration methods to estimate climate responses and test their feedback. Further, it is possible to use the estimated parameters to quantify uncertainties in integrated assessment models of the economic impacts of climate change. In an application I estimate a system of temperatures, ocean heat content, and radiative forcing including greenhouse gases, and find statistical support for the cointegrated energy balance model. Accounting for structural breaks from volcanic eruptions highlights large parameter uncertainties and shows that previous empirical estimates of the temperature response to increased CO₂ concentrations may be misleadingly low due to model-misspecification.

[e/article/pii/S0304407619301162#appSB](#)

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JEL classification

C32; Q54

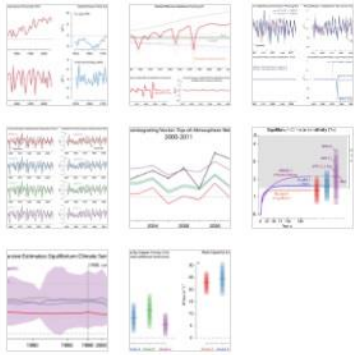
Appendix A. Supplementary material

The following is the Supplementary material related to this article.

 [Download : Download Acrobat PDF file \(503KB\)](#)

MMC S1. Supplementary material: additional results on the continuous to discrete mapping, stability of the estimated system, forecasting through the hiatus, estimation results when the model is estimated as an approximation in discrete time, univariate unit-root tests, residual plots, additional results on the impulse response analysis, and the relation between heat capacity estimates and climate feedback.

Figures (8)



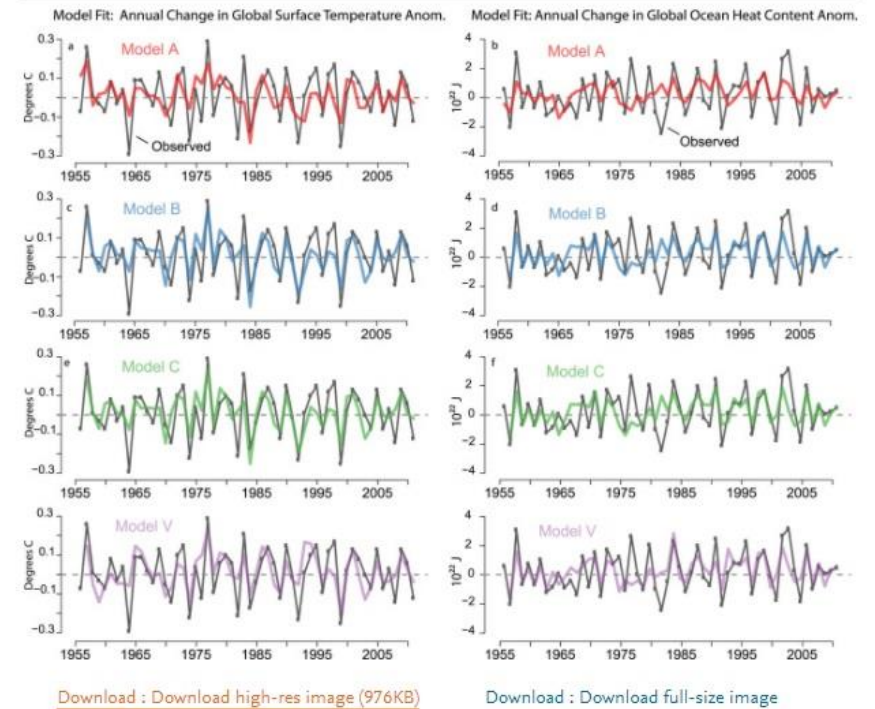
Hide figures 

Tables (2)

-  Table 1
-  Table 2

Extras (1)

-  MMC S1



Data in Brief

Data in Brief

Открытый доступ ⓘ

Годы охвата Scopus: с 2014 по настоящий момент

Издатель: Elsevier

ISSN: 2352-3409

Отрасль знаний: Multidisciplinary

<https://www.scopus.com/sourceid/21100372856?origin=recordpage>

[Просмотреть все документы >](#)

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CiteScore

[CiteScore рейтинг и тренды](#)

[Содержание Scopus](#)



Улучшенная методика расчета CiteScore

Рейтинг CiteScore 2019 отражает количество цитирований в 2016-2019 гг. статей, обзоров, материалов конференций, глав книг и информационных документов, опубликованных в 2016-2019 гг., деленное на количество публикаций за 2016-2019 гг. [Подробнее >](#)

CiteScore 2019

$$1.5 = \frac{6\,689 \text{ цитирований за 2016 - 2019 гг.}}{4\,385 \text{ документов за 2016 - 2019 гг.}}$$

Вычисление выполнено 06 Май, 2020

CiteScoreTracker 2020 ⓘ

$$1.5 = \frac{7\,481 \text{ цитирований на текущую дату}}{5\,009 \text{ документов на текущую дату}}$$

Последнее обновление 02 October, 2020 • Обновляется ежемесячно

Рейтинг CiteScore 2019 ⓘ

Examples

<https://www.sciencedirect.com/science/article/pii/S0014482715300239?via%3Dihub#ec0005>

<https://www.elsevier.com/authors/author-resources/data-visualization/virtual-microscope>

<https://www.sciencedirect.com/science/article/pii/S0140673620316044#fig5>

<https://www.sciencedirect.com/science/article/pii/S0304407619301162#fig4>

<https://www.sciencedirect.com/science/article/pii/S1087184517301512>

Vocabulary

<https://www.ref-n-write.com/trial/research-paper-sample-writing-methods-section-academic-phrasebank-vocabulary/>

<http://www.phrasebank.manchester.ac.uk/introducing-work/>

Literature:

1. C.R. Kothari. Research Methodology: Methods and Techniques. Jaipur, India: New Age International, 2004.
2. Geoffrey R. Marczyk, David DeMatteo, David Festinger. Essentials of Research Design and Methodology 1st Edition. Wiley, 2005. 304 pages
3. Jalongo, M. R. and N. Saracho, O. (2016) Writing for Publication - Transitions and Tools that Support Scholars' Success, Springer Texts in Education. doi: 10.1007/978-3-319-31650-5
4. Lantsoght, E. O. L. (2018) The A-Z of the PhD Trajectory, Springer Texts in Education. doi: 10.1007/978-3-319-77425-1.
5. Taylor, L. J. (2019) 'Efron, S.E., & Ravid, R. (2019). Writing the Literature Review: A Practical Guide. New York, NY: The Guilford Press. ISBN: 9781462536894. 298 pp. (softcover).', Family and Consumer Sciences Research Journal. doi: 10.1111/fcsr.12312.
6. Parija S., Kate V. (2018) Thesis Writing for Master's and Ph.D. Program. doi: 10.1007/978-981-13-0890-1.
7. Paul D. Leedy and Jeanne Ellis Ormrod. Practical Research: Planning and Design, Ninth Edition. Published by Merrill by Pearson Education, Inc.

Thank you for your attention!

