

COFFEE



LECTURE

u^b

^b
**UNIVERSITÄT
BERN**

Publishing a Cumulative Dissertation in Open Access on BORIS Theses: Requirements and Workflow



Dr. Andrea Hacker
Open Science
University Library

Tuesday,
13.05.2025,
13:00, Zoom

How dissertations are published

Cumulative and monograph publications

Cumulative

- Chapter(s) or results can (or have to) be published as articles in journals ahead of dissertation submission
- *Introductory Section* (or umbrella – in German: "Mantelpapier") binds the chapters/articles together but is rarely published on its own
- More prevalent in the natural and life sciences

Book-form

- The dissertation is an organic whole
- Aim is to publish the entire work at once in book-form
- More prevalent in HSS

First off: know your dissertation regulations

e.g. filing dissertations at Bern MedFak

"Submitting a Dissertation" (2023 ger)

"Die Universitätsbibliothek bietet Doktoranden/innen an, ihre Dissertation als Volltext im Internet zu veröffentlichen. Die Datei ist direkt der Universitätsbibliothek zu übergeben und muss inhaltlich identisch mit den gedruckten Pflichtexemplaren sein. Die Anleitung und die Einverständniserklärung können eingesehen werden unter [BORISTheses](#)"

Attention Graduate School PhDs:

Make sure to check the dissertation regulations of your graduate schools (GCB, GHS), e.g.:

Dissertation

Art. 6 ¹In der Regel muss eine Doktorierende oder ein Doktorierender mindestens drei wissenschaftliche Arbeiten in peer-reviewed Zeitschriften vorlegen. Eine Arbeit als Erstautorin oder Erstautor muss zur Publikation akzeptiert sein, zwei weitere müssen die Stufe des Peer-Reviews erreicht haben. Bei entsprechenden Projekten können Gesuche zur Abweichung der Anzahl einzureichender Publikationen zuhanden der Aufsichtskommission eingereicht werden.

²Eine Dissertation, bestehend aus Einzelpublikationen, muss zusätzlich zu den publizierten bzw. eingereichten Manuskripten eine ausführliche Einleitung und übergreifende Diskussion zum Thema der Dissertation enthalten sowie Lebenslauf mit Publikationsliste und eine Urheberrechtserklärung.

³Auf Antrag an die Aufsichtskommission besteht die Möglichkeit, die Dissertation als Monografie einzureichen.

What it looks like to the reader

BORIS Thea

Bern Open Repository and Information System

Home

Recurrent Rossby waves: drivers and links to persistent weather

Ali, Syed Muhsathir (2022). *Recurrent Rossby waves: drivers and links to persistent weather.* (Thesis). Universität Bern, Bern



Text
 2021, urn:nbn:org:boris:13610
 Available under license [Creative Commons Attribution \(CC BY 4.0\)](#).
[Download \(PDF\)](#) | [Preview](#)

Abstract

Upper-level Rossby wave packets (RWPs) are one of the key drivers of surface weather. RWPs can lead to extreme surface weather events. However, extreme impacts can also arise from long spells of persistent weather. Recurrence of synoptic-scale RWPs, termed RWPs, where RWPs recur in the same phase over a short period, can also lead to persistent weather. The importance of RWPs has only been identified recently. This thesis aims to explore the role of RWPs in modulating persistent weather events and discover the atmospheric processes driving RWPs. First, the thesis quantifies the significance of RWPs for dry and wet spells across the globe. Persistent dry spells can lead to droughts, make heatwaves more extreme, and increase the risk of forest fires. The thesis finds that RWPs are significantly associated with longer dry and wet spells across the globe. The case studies further demonstrate the role of RWPs during episodes of dry and wet spells, respectively. Next, the thesis explores the role of RWPs for heat spells in the SH. For heat spells, RWPs are significantly associated with longer hot spells over several regions, including south-eastern Australia (SEA), a region that has seen increasingly extreme heatwaves in recent decades. Motivated by this, the importance of RWPs for the set of most persistent and extreme SEA heatwaves is explored further. The role of RWPs during SEA heatwaves is demonstrated by two case studies of 2006 and 2009 SEA heatwaves, where RWPs help to build recurrent ridges over the SH. Furthermore, days with RWP conditions over SEA are associated with an increased probability of SEA heatwaves. Given the vital role of RWPs for SEA heatwaves, the thesis sets out to find the association of RWPs with other atmospheric drivers of persistent weather, namely, atmospheric blocks and quasi-resonance amplification (QRA). QRA conditions were also detected during some episodes of the most persistent and extreme SEA heatwaves. We find that RWPs and QRA are closely associated in the SH, with 64% of QRA days also featuring RWP conditions. We study their close association with upper-level composite maps and discuss the similarities and differences in the algorithm used to identify them. For the link of RWPs and QRA with blocks in SH, we find an insignificant increase in the median area of blocks for days with RWP than without and a slight decrease for QRA days than non-QRA days. We also find substantial differences in the spatial distribution of blocks between QRA days and RWP days. Motivated by this, the vital role of the RWPs, the latter part of this thesis investigates the close drivers of RWPs in the Northern Atlantic for the winter and summer seasons. RWPs associated for summer and winter are used to explore the possible causal drivers of RWPs, whose relevance is subsequently examined in a causal network (CN) framework. The CN reveals that local changes over the Atlantic in atmospheric blocking and low-frequency background flow primarily drive RWPs for both seasons. RWPs also have feedback on background flow and blocks. In winter, tropical forcing has an indirect link, with RWPs, which drives background flow changes over the Pacific, and subsequently modifies background flow over the Atlantic. In summer, a direct link from background flow over the Pacific to RWPs exists. CNs also reveal a robust link from extratropical to tropical in the summer, where background flow over North Atlantic drives changes in the background flow over the Pacific.

Item Type:	Thesis
Granting Institution:	Faculty of Science, University of Bern
Dissertation Type:	Cumulative
Date of Defense:	1 September 2022
	500 Science
	500 Science > 500 Physics
	500 Science > 550 Earth sciences & geology
	08 Faculty of Science
Institute / Center:	08 Faculty of Science > Physics Institute > Climate and Environmental Physics
Depositing User:	08 Faculty of Science > Institute of Geography
	Syed Muhsathir Ali
Date Deposited:	12 Jan 2023 09:08
Last Modified:	12 Jan 2023 09:08
URL:	https://boris.thea.unibe.ch/handle/urn:nbn:org:boris:13610

Requirements

Cumulative dissertations: rights, obligations

Rights questions with published texts

- Publisher contract stipulations
 - Embargo
 - Licence
 - Version
- Funder obligations
 - Embargo
 - Licence
 - Version
- University obligations (e.g. PhilNat)

Additional rights issues

- Copyright for third party material (e.g. images, media files)
- Privacy rights, sensitive data

TIPS:

- publish articles immediately in OA with a CC-BY license
- clear third party material while writing

Workflow Boris Theses

For authors

Submission pack for BT

- PDF-A of dissertation with correct licencing information
- PDF-A with abstract
- Rights clearance documents
- Signed declaration of consent (send the original per mail)

Formalities

Dissertation must correspond formally and in terms of content with the version submitted to the faculty (incl. Cover)

Exceptions:

- Applied license information
- Removed author CV
- Layout or citation style of publishers can be applied

Workflow Boris Theses

For authors

Submission procedure:

- After acceptance by faculty and all necessary submission files were sent to boristheses@unibe.ch, send the signed declaration of consent to:

*Universität Bern, Universitätsbibliothek Bern, E-Library,
Hochschulstrasse 6, 3012 Bern*

- Time to publication: approx. 10 days

Writing tool: SciFlow

- Create an account with your unibe.ch address
- https://www.ub.unibe.ch/services/open_science/services/writing_tool/index_eng.html
- There are templates you can use
- Contact: elio.pellin@unibe.ch

Achtung: PhilNat: [Guidelines for the design of the dissertation \(DOCX, 28KB\)](#).

Workflow Boris Theses License

License information:

- If you publish your dissertation on BORIS Theses, you must include the open-access license in the front-matter
- Make sure to link to the full-text of the chosen licence
- Point out, if various licences apply to different parts of the dissertation



This is an open access dissertation distributed under the terms of the [Creative Commons CC BY](#) license, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

This license does not apply to chapter 3 and 4:

© Swiss School of Public Health (SSPH+) 2019 (for chapter 3)

© The Author(s) 2021. Published by Oxford University Press. All rights reserved. For permissions, please email: journals.permissions@oup.com (for chapter 4)

Further information and contact

Get in touch!

More info on BORIS Theses

- [BORIS Theses](#)
- Information [website](#)
- [Guidelines](#) for submission
- [Declaration of Consent](#)

Contact

- boristheses@unibe.ch
- openaccess@unibe.ch

Thanks



**for your
attendance**

u^b

^b
**UNIVERSITÄT
BERN**

Now there is time for...

Questions & Discussion

**Research Support Services
Science and Medical Libraries
University Library Bern**
frnat.ub@unibe.ch
support_med.ub@unibe.ch