



End-term workshop "Climate Predictability & Inter-regional Linkages"

Looking at achievements & future research priorities

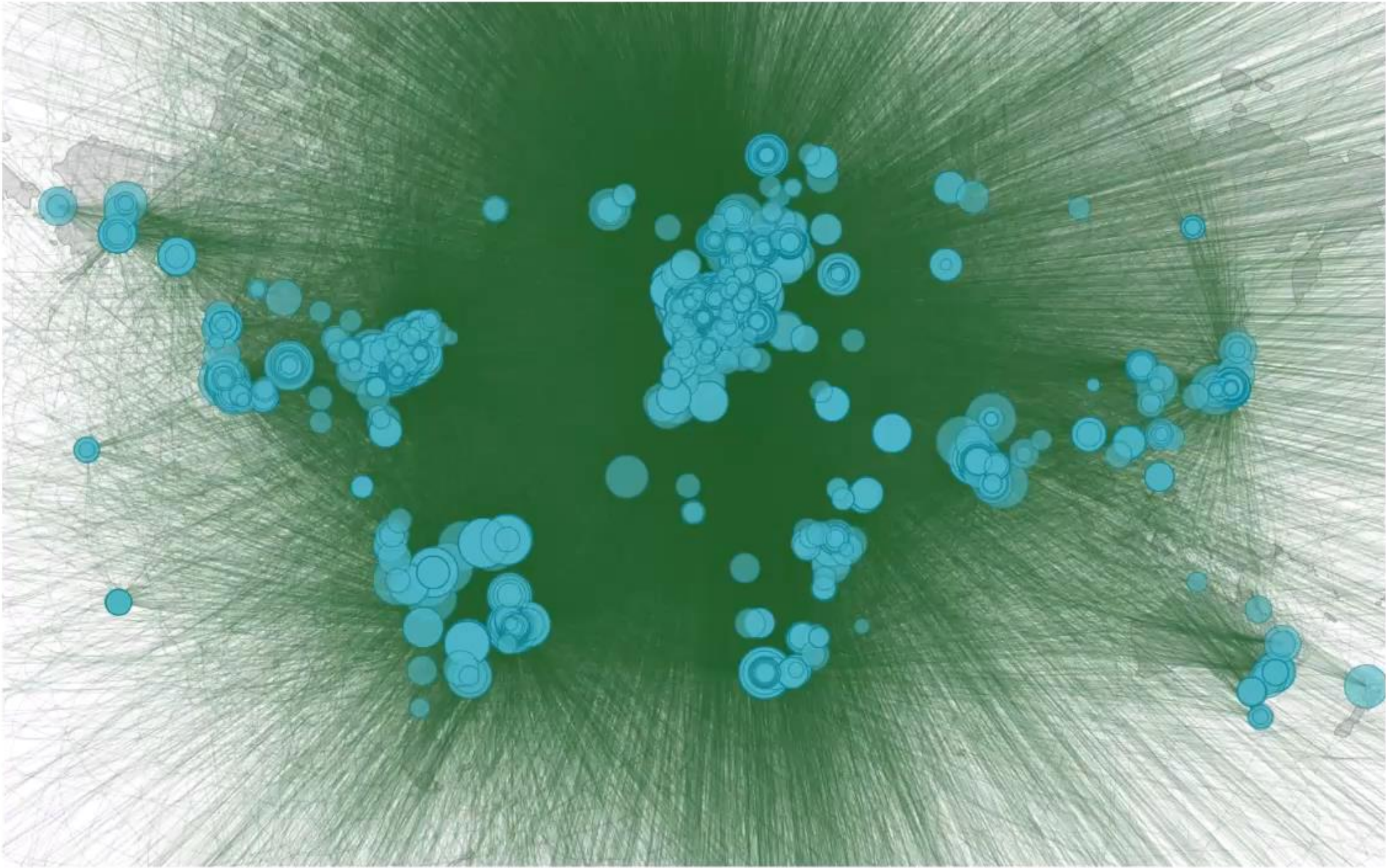
Introduction to breakout group *Transdisciplinarity & networking*

Erica Key, Belmont Forum Secretariat

BELMONT
FORUM







Transdisciplinarity

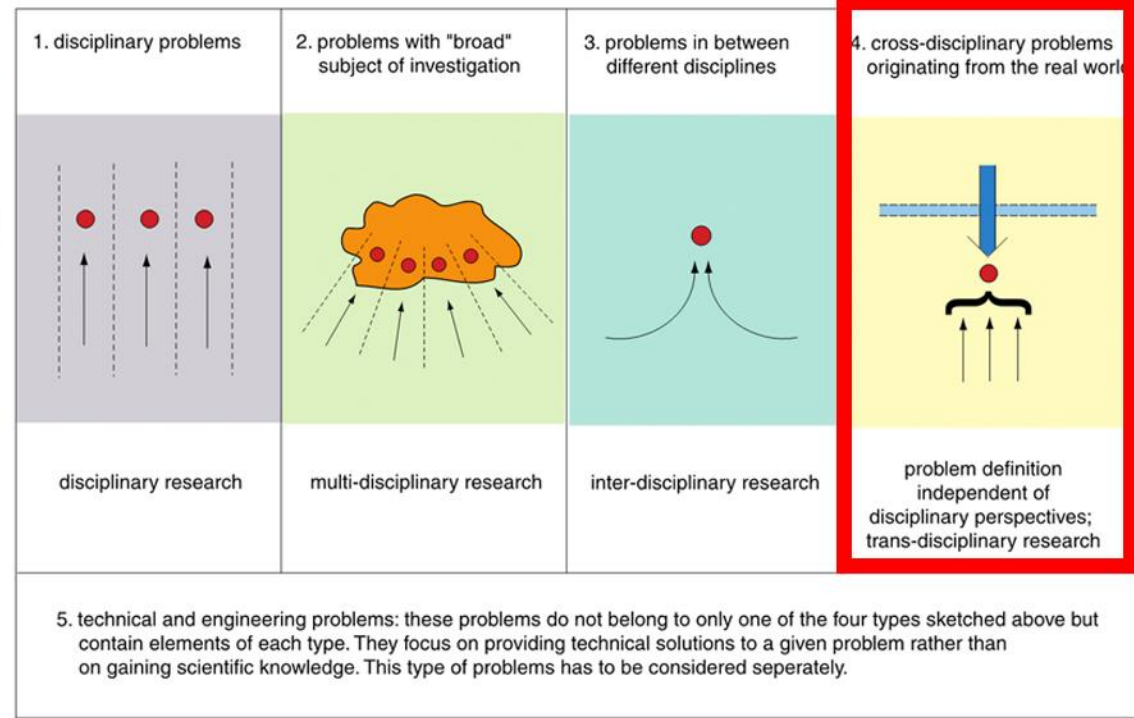
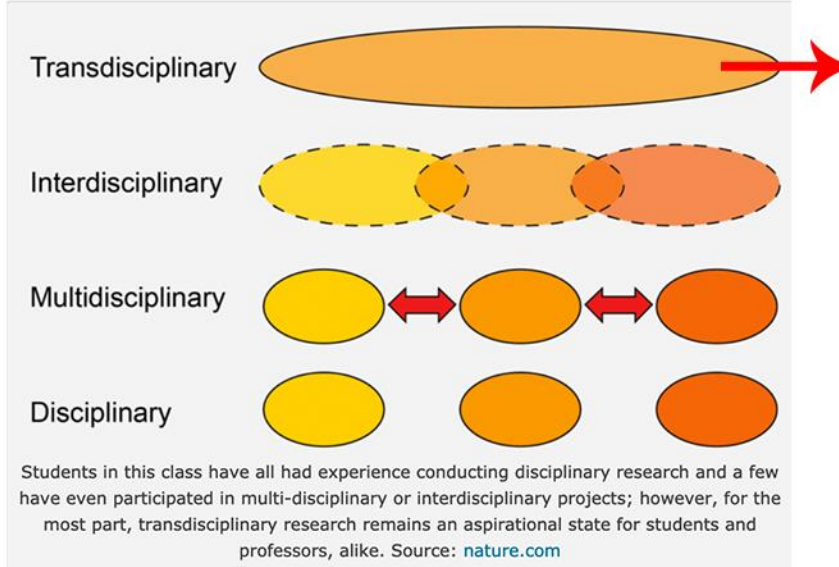


Figure 1: Definition of five types of scientific problems and distinction of transdisciplinary research from inter- and multidisciplinary research. — : discipline, ● : scientific problem, ----- : boundaries between disciplines, ■■■■ : boundary between scientific system and "real world". [1]

Advanced Course
to be offered in August

Climate
Predictability

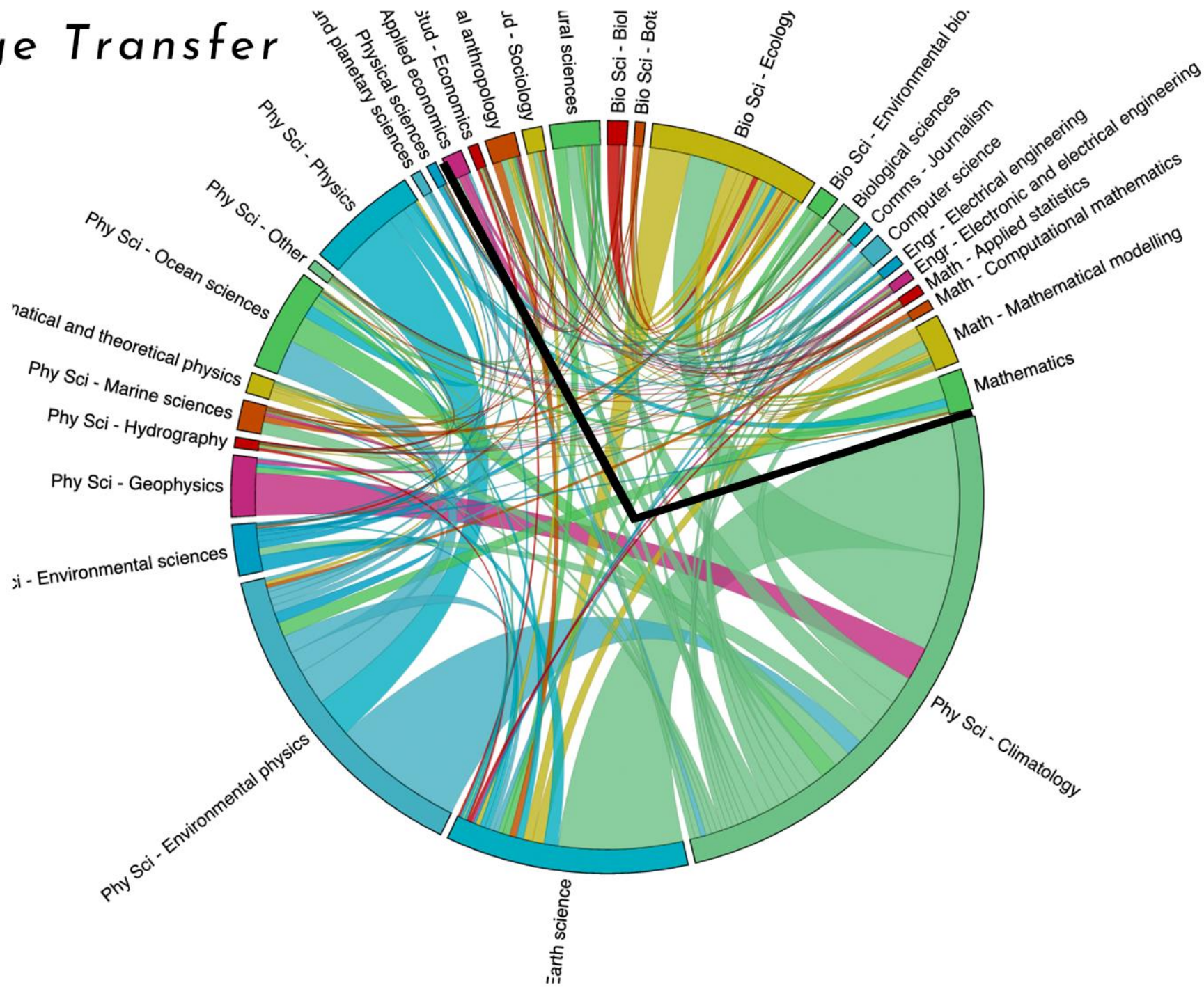
& Inter-regional
Linkages

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Workshop: Transdisciplinary co-design,
integration and implementation

Knowledge Transfer



Climate
Predictability

& Inter-regional
Linkages





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Ecology Ocean and marine sciences Journalism

Theoretical physics Economics

Applied statistics Computational mathematics

Mathematics Mathematical modeling

Electrical engineering Computer science

Social anthropology Environmental physics

Applied economics Climatology Agricultural sciences

Environmental biology Environmental sciences Geophysics

Physical sciences Cultural anthropology

Hydrography Space and planetary sciences

Physics Earth science

Electronics



Agricultural sector
 Ecology Ocean and marine sciences Civil defense agencies
 Natural resource managers Journalism
 Theoretical physics Economics K-12 schools
 Animal health services Computational mathematics IPCC
 Applied statistics Mathematical modeling
 Renewable energy sector National forecasting centers
 Mathematics Water administrators Computer science
 Electrical engineering Environmental physics
 Government ministries Agricultural sciences
 Social anthropology Markets Electricity system operator
 Climatology Geophysics
 Applied economics Local government groups
 Environmental biology Environmental sciences
 National universities
 National meteorological services Cultural anthropology
 Unionized advisory groups
 & Inter-regional Physical sciences Space and planetary sciences
 Linkages Agricultural NGOs
 Earth science
 Hydrography Rural resource managers
 Physics Electronics

Climate
Predictability

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6th Chinese Conference on Dendrochronology

Nansen Tutu Center 10th anniversary symposium: Ocean, weather and climate, science to the service of society. 10-12 March 2020. Cape Town, South Africa in parallel with OOPC panel

& Inter-regional
Linkages

Sixth International Workshop on Monsoons

(IWM-6)

Singapore, 13-17 November 2017

Fourth International Conference on Earth System Modelling (ICESM)

Winter Polar Vortex Workshop

18th IUAES World Congress

WORLD (OF) ENCOUNTERS:
THE PAST, PRESENT
AND FUTURE OF
ANTHROPOLOGICAL
KNOWLEDGE



Florianópolis Brazil
July 16 - 20, 2018
Federal University of Santa Catarina (UFSC)

The first circular

WCRP/SPARC SATIO-TCS joint workshop on
Stratosphere-Troposphere
Dynamical Coupling in the Tropics



SATIO-TCS
Stratospheric and Tropospheric
Interactions
Tropical Circulation Systems



INCOMPASS project
part of the NERC/MoES Monsoons Programme 2015-2018

FaHCE
FACULTAD DE HUMANIDADES Y
CIENCIAS DE LA EDUCACIÓN

IX Jornadas de Sociología de la UNLP
5, 6 y 7 de diciembre de 2016

Organiza:
Departamento de Sociología de la Facultad de Humanidades y
Ciencias de la Educación (UNLP)

5th International Conference on Reanalysis

8TH GEWEX OPEN SCIENCE
CONFERENCE: EXTREMES AND WATER
ON THE EDGE

MAY 6 - 11, 2018 | CANMORE, ALBERTA, CANADA

PAMIP workshop 2019

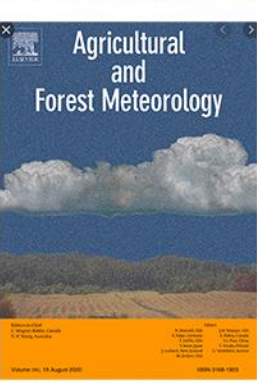
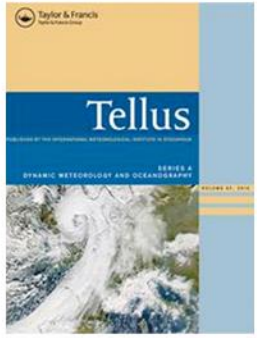
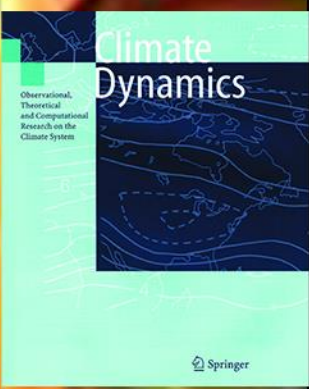
Created: 28 September 2018



PAGES Zaragoza 2017

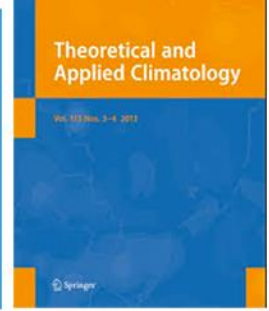
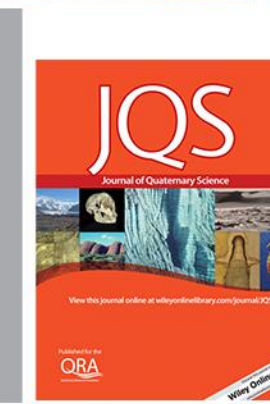
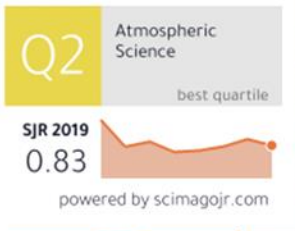
5th Open Science Meeting

Global Challenges for our Common Future:
a paleoscience perspective



Communication

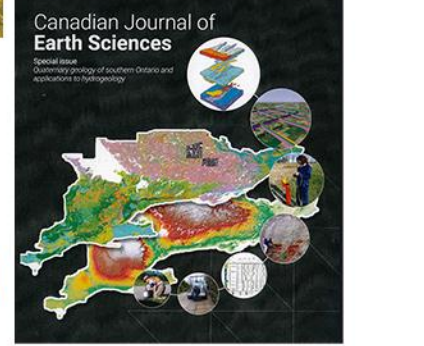
Scientific Online Letters on the Atmosphere



Journals

atmosphere

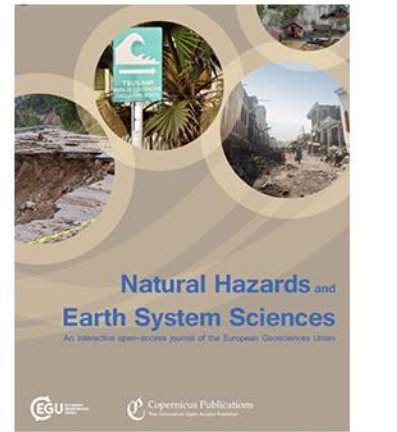
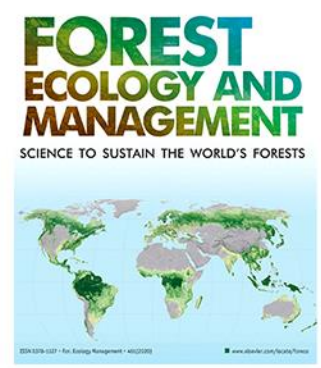
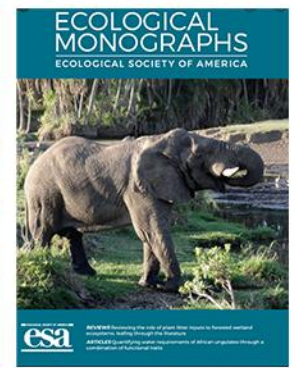
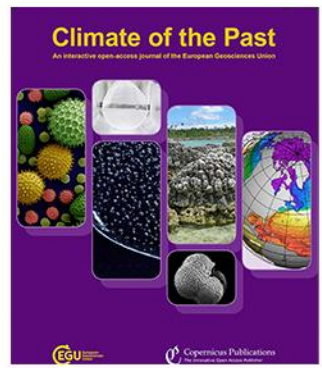
an Open Access Journal by MDPI

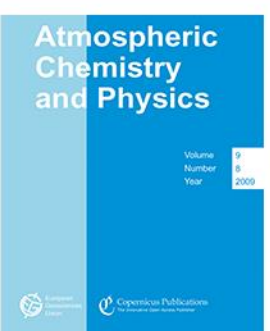
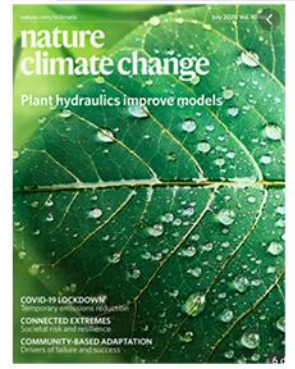
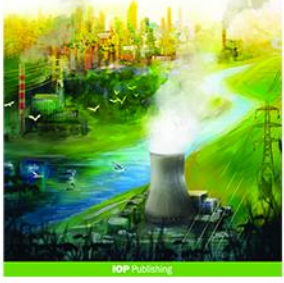
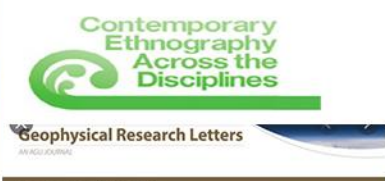
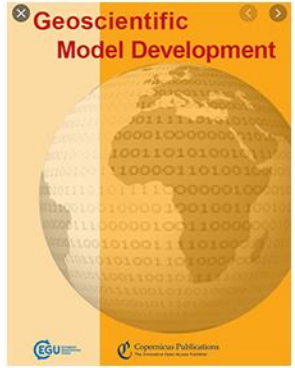
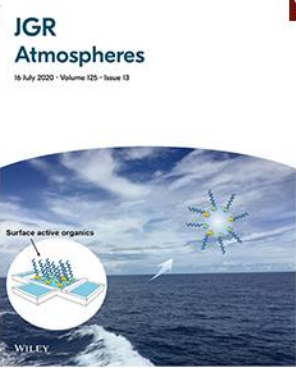
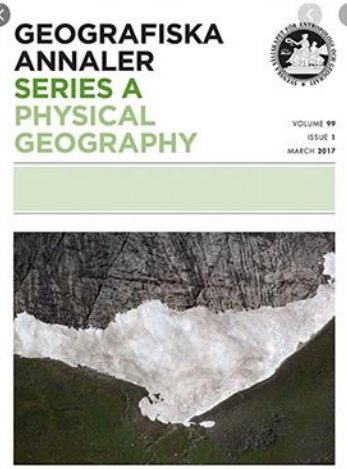
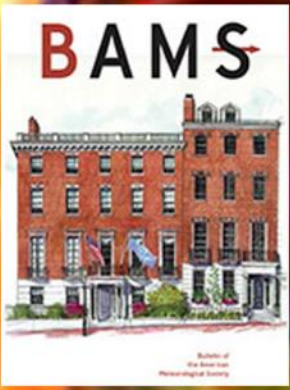
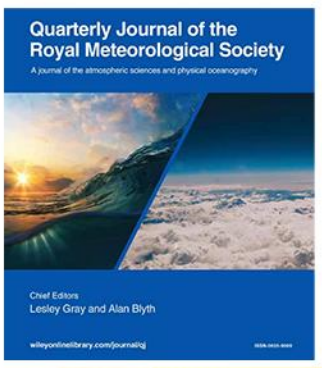
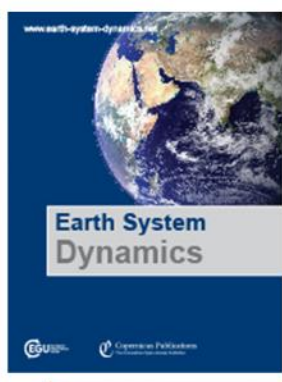
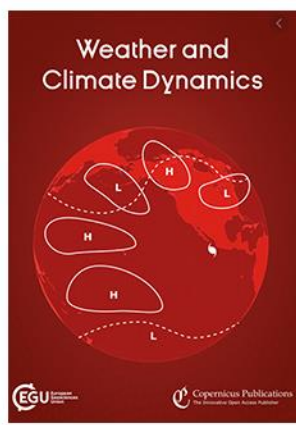
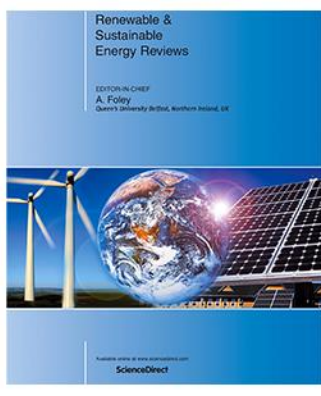
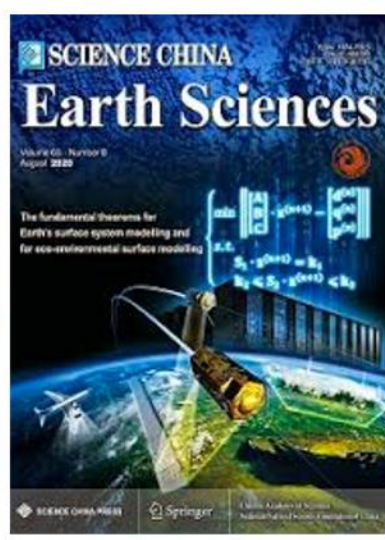


Climate Predictability



& Inter-regional Linkages





Climate Predictability

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Presented in collaboration with Borealis – a festival for experimental music

Next Step 3 – Climate

We join with Borealis, Bergen’s festival for new and contemporary music, for this performance of two new works that address the season’s theme of climate change and the challenges it presents and as part of our NEXT STEPS series, we welcome academics from the University of Bergen to illuminate what we hear.

Weather influences: Dr Robert Lee (Meteorology) was interviewed by Talk Radio about his study showing forecasts of weather patterns in the UK can be aided by looking at recent weather in the tropics and East Pacific.



← Desert Dust in the Atmosphere: Giant Particles, Giant Consequences? Rainfall decline over Eastern Africa linked to shorter wet seasons →

From Indonesia to the British Isles: using El Niño and weather patterns in the tropics to help predict North Atlantic and European weather

Posted on 10 February, 2020 by danaallen



For our weather next month, take a look at Kuala Lumpur



Thunderstorms in Kuala Lumpur and the tropics cause effects that spread across the globe
ALAMY

To predict the weather in Kilburn or Kinross it is worth studying the outlook in Kuala Lumpur, a study suggests.



Seminar talk: Sea surface temperature variability and predictability based on prescribed wind-stress simulations

Annika Reintges from GEOMAR Helmholtz Centre for Ocean Research will give a seminar talk on 13 August.



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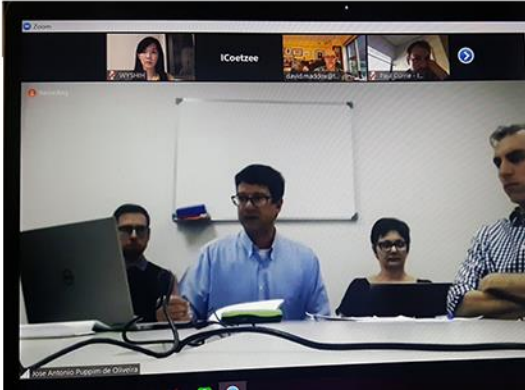
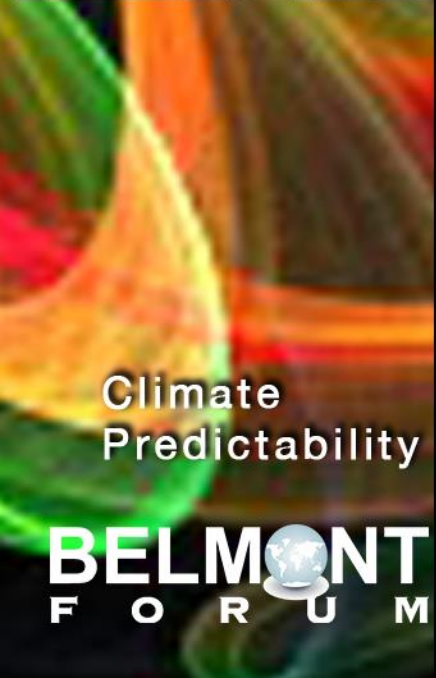
**& Inter-regional
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De-colonizing groundwater governance? Learning from local initiatives to care for, share, or recharge aquifers.

Margreet Zwarteveen
Date: 27 February 2020 Time: 7:00 PM
Finishes: 27 February 2020 Time: 8:30 PM
Venue: Brunei Gallery Room: B103
Type of Event: Seminar





Belmont Forum @Belmont_Forum · 9h
 Tomorrow we will have our first meet with the Arctic Resilience awardee teams. If you haven't already, check out their project videos on the @Belmont_Forum YouTube channel & follow the teams' progress @SeMPER_Arctic, @SERUSproject, nicharctic.ca, mpi.ysn.ru/en/



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HOME ABOUT CRAS OPPORTUNITIES POST-AWARD eIDM IMPACT PROJECTS NEWS CALENDAR RESOURCE LIBRARY CONNECT



16th Annual Meeting
 Asia Oceania Geosciences Society

AOGS

28 Jul- 2 Aug 2019
 Singapore

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Annual Report 2017

BELMONT FORUM

multi-national funding to address urgent needs in global change research

Awardee Network Map 2012-2016

- More than 40 funding partners on six continents supporting 48 active projects
- Awardees include participation from 420 scientists and stakeholders in more than 35 countries
- Projects leverage existing expertise and investments to construct an ever-broadening network of scientists and funding partners
- Advancing interdisciplinary and transdisciplinary science in multi-national research projects
- Implementing a global open data policy and principles which began from scientific and stakeholder communities
- Ensuring access to country-relevant results and decision tools to inform human action and adaptation to global environmental change

Open data access is being developed through activity in four thematic areas:

- Coordination
- Data Planning
- e-Infrastructures
- Human Dimensions

Become part of our global network. Visit www.belmontforum.org for current activity and future opportunities.



Climate Predictability

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Mark Howden
 Australian National University

Ioan Fazey
 University of York

Tobias Buser
 Swiss Academies of Arts and Sciences

Mauricio Molina
 Universidad de Valparaiso

Susanne Moser
 Antioch University New England

Ursula Oswald
 Universidad Autónoma de México

Susanna Ehlers
 Inter-American Institute for Global Change Research

TRANSFORMATIONS 2019
 October 17th 2019
 Santiago, CHILE

Transforming Our World

Swiss Science Briefing 2020

A Sustainable Europe through Transdisciplinary Research

05 February 2020 – 17:30-20:00
 Mission of Switzerland to the European Union
 Place du Luxembourg 1
 1050 Brussels

swiss academies of arts and sciences

SHARING KNOWLEDGE & EXCELLENCE

Belmont Forum Data Management Plan Scorecard

 Bishop, Bradley W.;  Ungvari, Judit;  Davis, Rowena I;  Lee, Tina;  Goudeseune, Lise;  Virapongse, Arika; Samors, Robert J.

This document is a resource developed for the Belmont Forum for evaluating formal Data Management Plans submitted by research teams who've been awarded Collaborative Research Action funding.

The purpose and use of this Scorecard is three-fold:

1. as an evaluation tool to quantitatively assess full proposal DMP responses to questions drawn from the Data and Digital Outputs Management Plan (DDOMP) template that are included in the Belmont Forum grant application process on BFGO.org;
2. as a training resource to be shared with potential proposers to help define expectations for data management and/or with awardees (i.e., post-award) to identify specific elements of their data management planning efforts that may be unclear or lacking; and/or
3. as an evaluation tool employed by the Secretariat or TPOs to assess milestones and progress during mid- or end-term project review/valorization.

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Data Management Training Webinar
193 views · Apr 23, 2018

Belmont Forum Research Goals and Methods Section 3: Data Planning and Resources
23 views · Apr 16, 2019

Why Data Management (BF DMT Module 1)
209 views · Jun 3, 2019

Toolkit Training 3: Training Options
31 views · Apr 9, 2019

How Data Management (BF DMT Module 2)
14 views · Apr 9, 2019

DDOMP Resources on YouTube

Additional Considerations for Data Management (BF DMT Module 3)
31 views · Jun 3, 2019

Toolkit Training 1: Welcome to the Data Management Toolkit!
84 views · Apr 9, 2019

Toolkit Training 1: Welcome to the Data Management Toolkit!
84 views · Apr 9, 2019



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Datasets (5)

- BITMAP: Tracks of western disturbances transiting over Pakistan and north India in ERA-Interim reanalysis data (1979-2015)**

Register/Login for access

Explore

More Info
- BITMAP: Tracks of western disturbances transiting Pakistan and north India from various CMIP5 Historical experiments**

Register/Login for access

Explore

More Info
- BITMAP: Tracks of western disturbances transiting Pakistan and north India from various CMIP5 RCP45 experiments**

Register/Login for access

Explore

More Info

Dataset

NERC SCIENCE OF THE ENVIRONMENT

INTEGRATE: climate model simulations data to study the Asian climate response to Atlantic Multidecadal Oscillation (AMO) using the Intermediate General Circulation Model version 4 (IGCM4)

Register/Login for access | Explore | See Related Documents

& Inter-regional
Linkages



Open Data
FAIR-like Principles

East Asia 1150 Year Composite Reconstruction of Multidecadal Temperature Changes

Originator:
Wang, J.L.; Yang, B.; Osborn, T.J.; Ljungqvist, F.C.; Zhang, H.; Luterbacher, J.

Citation Information:
Jianglin Wang, Bao Yang, Timothy J. Osborn, Fredrik Charpentier Ljungqvist, Huan Zhang, Juerg Luterbacher. 2018. Causes of East Asian Temperature Multidecadal Variability Since 850 CE. Geophysical Research Letters, 45(24), 13485-13494. doi: 10.1029/2018GL080725

NOAA Study Page:
<https://www.ncdc.noaa.gov/paleo/study/27372>

JSON Metadata:
<https://www.ncdc.noaa.gov/paleo-search/study/search.json?xmlId=67495>

DIF Metadata:
<http://www1.ncdc.noaa.gov/pub/data/metadata/published/paleo/dif/xml/noaa-recon-27372.xml>

ISO Metadata:
<http://www1.ncdc.noaa.gov/pub/data/metadata/published/paleo/iso/xml/noaa-recon-27372.xml>

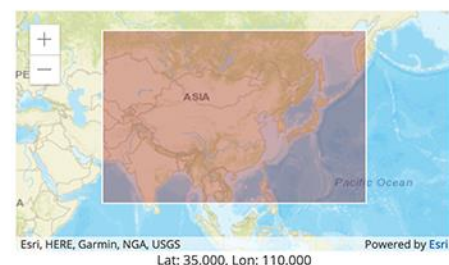
CLIMAX DIALOGO BERMEJO

Datos Oficiales

Red Comunitaria

Pronóstico Diario SMN

Pronóstico semanal CLIMAX



Citation: Carré, Matthieu; Azzoug, Moufok; Zaharias, Paul; Camara, Abdoulaye; Cheddadi, Rachid; Chevalier, Manuel; Fiorillo, Denis; Gaye, Amadou T.; Janicot, Serge; Khodri, Myriam; Lazar, Alban; Lazareth, Claire E.; Mignot, Juliette; Mitma Garcia, Nancy; Patris, Nicolas; Perrot, Océane; Wade, Malick (2018): Mollusk shell $\delta^{18}O$ in the past 1600 years in the Saloum Delta, Senegal. PANGAEA, <https://doi.org/10.1594/PANGAEA.892303>.

Climate mean state and trends

- * BIOME 6000 Update : <https://researchdata.reading.ac.uk/99/>
- * Global Lake Status Database Update
- * Reading Paleofire Database
- Collaboration with the Global Paleofire Working Group of PAGES (http://www.pastglobalchanges.org/index.php?option=com_content&view=article&id=224&Itemid=248) to produce an updated version of the Global Charcoal Database
- * SISAL (Speleothem Isotopes Synthesis and AnaLysis Working Group) : <https://researchdata.reading.ac.uk/242/>
- * Mollusk data as a proxy for Sahel precipitation (Carré et al. 2019)
- * Tropical ocean multi proxy synthesis



Climate
Predictability

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Branch: master

Go to file

Code

TimOsbornClim committed 0b9ae78 on Nov 15, 2017 7 commits 1 branch 0 tags

CRUST	Add empty output folders	3 years ago
data	Add CRUST paper data files	3 years ago
CRUST_readme.pdf	Add documents	3 years ago
CRUST_structure.pdf	Add documents	3 years ago
CRUST_userguide.pdf	Add documents	3 years ago
LICENSE.md	Add license	3 years ago
README.md	Update README.md	3 years ago

Digital Objects Sharing



$p_k = Ck^{\beta}$
 $p(l) \propto \exp(-l/\gamma)$
 $G = (V, E)$
 $\sigma_{jk}(i)$
 σ_{jk}
pyunicorn

home | search

Introduction

build passing

pyunicorn (Unified Complex Network and RecurreNce analysis toolbox) is a fully object-oriented Python package for the advanced analysis and modeling of complex networks. Above the standard measures of complex network theory such as degree, betweenness and clustering coefficient it provides some **uncommon but interesting statistics** like Newman's random walk betweenness. **pyunicorn** features novel **node-weighted (node splitting invariant) network statistics** as well as measures designed for analyzing **networks of interacting/interdependent networks**.

About

CRUST: Climatic Research Unit
Standardisation of Tree-ring data

crudata.uea.ac.uk/cru/software...

climate dendroclimatology

tree-ring-chronologies

Readme

GPL-3.0 License

Releases

No releases published

OSFHOMESearch

Palaeo-Constraints on Monso... Files Wiki Analytics Registrations

Notice: Due to a recent spike in spam activities, we have increased our measures to flag spam content on... been flagged in error.

Karstfor_NASAdata.py (Version: 1)

Palaeo-Constraints on Monso...
OSF Storage (United States)
Karstfor_NASAdata.py
PLOT_NASADATA_outpu...
Sabela_PACMEDY_Repo...

```
#!/usr/bin/env python
#####
# program karstfor
#
# Author : Sabela Regueiro Sanfiz
#
# If you have any doubt, just drop me a message:
#####
KASTFOR - lumped parameter model
```




Origin of seasonal predictability for summer climate over the Northwestern Pacific

Overview of attention for article published in Proceedings of the National Academy of Sciences of the United States of America, April 2013



About this Attention Score

In the top 25% of all research outputs scored by Altmetric

SUMMARY Blogs Policy documents Twitter Dimensions citations

Title Origin of seasonal predictability for summer climate over the Northwestern Pacific
Published in Proceedings of the National Academy of Sciences of the United States of America, April 2013
DOI 10.1073/pnas.1215582110
Pubmed ID 23610388
Authors Y. Kosaka, S.-P. Xie, N.-C. Lau, G. A. Vecchi
Abstract Summer climate in the Northwestern Pacific (NWP) displays large year-to-year variability... [show]

View on publisher site

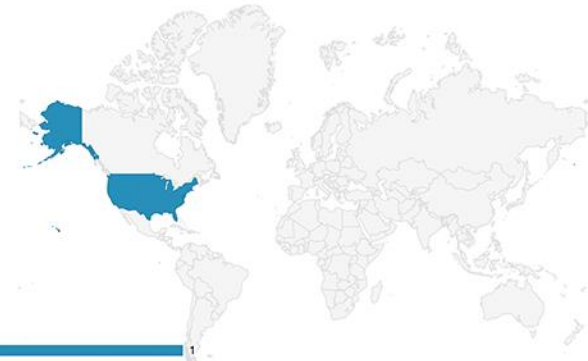
Alert me about new mentions

Mentioned by
 1 blog
 1 policy source
 4 tweeters

Citations
 141 Dimensions

Readers on
 90 Mendeley
 2 CiteULike

What is this page?



Geographical breakdown

Country	Count	As %
United States	1	25%
Hong Kong	1	25%
Unknown	2	50%

Demographic breakdown

Type	Count	As %
Members of the public	3	75%
Scientists	1	25%

TWITTER DEMOGRAPHICS MENDELEY READERS ATTENTION SCORE IN CONTEXT

The data shown below were collected from the profiles of 4 tweeters who shared this research output. [Click here to find out more about how the information was compiled.](#)

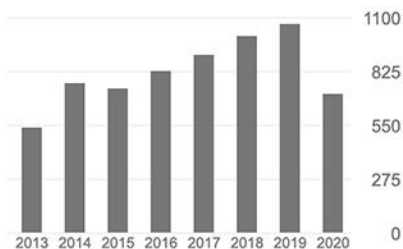


Carolina Vera

CIMA/FCEN/UBA-CONICET UMI-IFAECI/CNRS
 Verified email at cima.fcen.uba.ar

Climate variability and chan...

	All	Since 2015
Citations	8395	5265
h-index	33	27
i10-index	58	49



Noel Keenlyside

University of Bergen | UiB · Geophysical Institute
 i10 41.35

About Network Publications (205) Projects (1)

205 Publications

24,952 Reads

8,663 Citations

Career advancing metrics

- Mendeley Profile
- Google Scholar
- Research Gate
- ORCID
- Altmetrics
- Citation indices

Climate Predictability

& Inter-regional Linkages

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What was your greatest added value?

Economic
Enhanced knowledge Interconnected technology
Profitability Network development Translation
Community support cross sector governance
Scholar exchange
Open data Preventative Measures
Collaborative development Scalability
Policy Web services Early career support
Decision support Intervention
Marketability
Ecosystem services Best practices
Transdisciplinary training
& Inter-regional Linkages Security
Management Technology Transfer
International partnerships
Digital Health Systems

Climate
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Codevelopment of a community network of rainfall monitoring

A warmer Pacific Ocean in the following decades could accelerate the ongoing Arctic warming

Identification of worst case scenarios for renewable energy systems

Model spread relative to stratospheric response to Arctic sea ice loss is related to depth and lateral extent of the tropospheric dynamical response

Early summer moisture is the primary controlling factor for tree growth in Northwestern China

Improved predictability of high impact climate events, such as Extreme Cold Spells over Central Asia

Outcomes

There are inconsistencies in the identification of high latitude blocking by algorithms

Distinguish influences of large scale modes of internal variability, external natural, and anthropogenic forcings on the East Asian warm season temperature

Around 50% of sea ice reduction in the past two decades might be due to interdecadal climate variability

Development of fire risk maps for Sweden

& Inter-regional Linkages

Arctic sea ice loss and its linkage to the stratosphere may lead to a nonlinear atmospheric response to global warming

The contribution of CO₂ fertilization to changing tree growth still needs to be explored because climate and CO₂ are changing simultaneously.

Climate Predictability

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RACArctic



WASTE FEW ULL
WASTE: FOOD - ENERGY - WATER URBAN LIVING LABS



TAPESTRY

BioDiv-Support



Arctic-Biodiver



COPERA



BAAMRGP



BIOESSHEALTH

CONNECT

ENLARGE



WILDHEALTH



Future Bird Scenarios

CON-VIVA

SEC BIVIT



AFV

THESIS



FATE

GoST

CLIMTREE

HIARC

TSUNAGARI



ACCEDE



SALBES



PARSEC



SMARTS2



TRUEPATH



SAHEWS



PACMEDY

METABOLIC

SOMBEE



BONDS

Balancing biodiversity coNServation with Development in Amazonian wetlands



AGENTS



FICESSA

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Reef-FUTURES

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Artisticc
Adaptation Research, a Trans-disciplinary transnational community and policy-centred approach



