

Research for the future of our freshwaters



Adrian et al. 2012

Internationale Ko-operationen



global lake ecological observatory network



Environmental stability and lake zooplankton diversity – contrasting effects of chemical and thermal variability

Jonathan B. Shurin,^{1†} Monika Winder,² Rita Adrian,³ Wendel (Bill) Keller,⁴ Blake Matthews,⁵ Andrew M. Paterson,⁶ Michael J. Paterson,⁷ Bernadette Pinel-Alloul,⁸ James A. Rusak^{6,9} and Norman D. Yan^{6,10}

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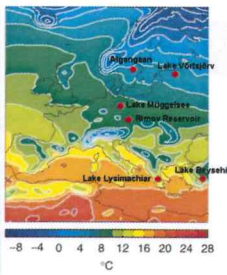


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Experimental-Anlagen

Effects of changes in water level on plankton communities



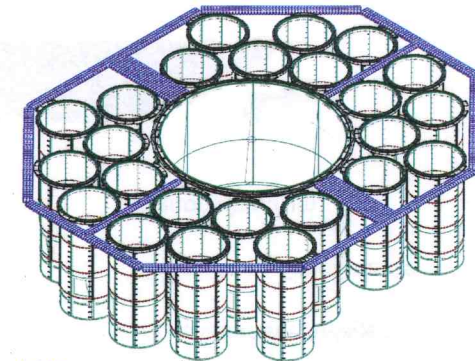
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Seelabor im Bau...



SeeLabor im Stechlin



Durchmesser:
1×30 m
24 × 9 m

Tiefe:
20 m

Fläche:
2.233 m²

Volumen:
44.660 m³



Research for the future of our freshwaters

Fallbeispiele / Best Practise IGB - Berlin

Rita Adrian

Workshop_Forschungsdaten: Mai 2012

Forschungsrichtungen



Daten (gigantisch) getriebene Forschung

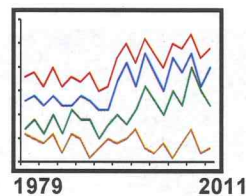
- Langzeitforschung
- Experimental – Anlagen
- Ganz – See – Experimente
- Genom-Zentrum



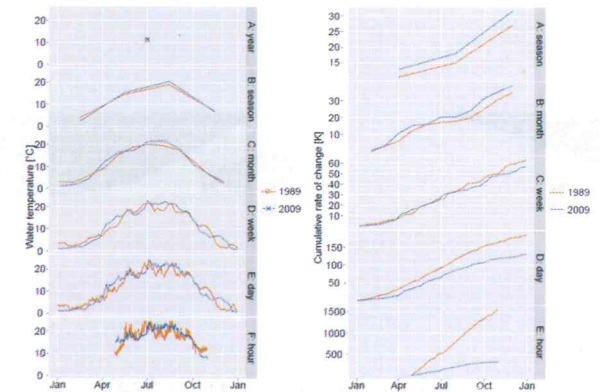
Langzeitforschung



- ~30-50 yr physical, chemical, and planktological time series
- Temporal scale: minutes, daily, weekly, monthly



High temporal resolution....



Meßgeräte



Ganz – See - Experimente



Pakt-Projekt TERRALAC

Effekte natürlicher C-Einträge auf Nahrungsnetz von Flachseen



Experimentelle Verdopplung des Eintrages terrestrischen Kohlenstoffs durch Zugabe von Maisblättern (distinktes C-Signal)

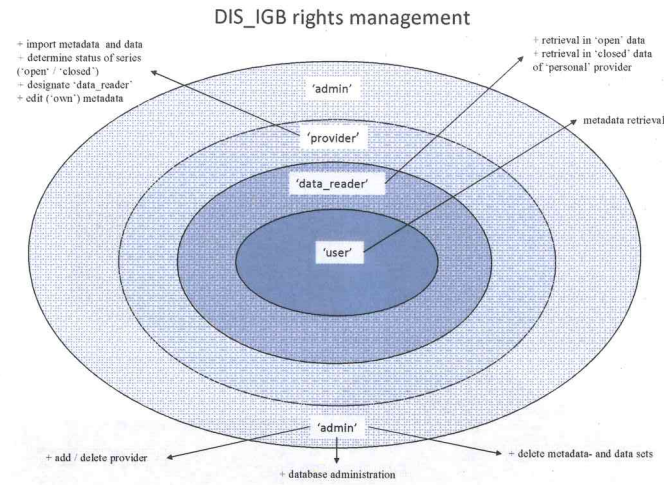
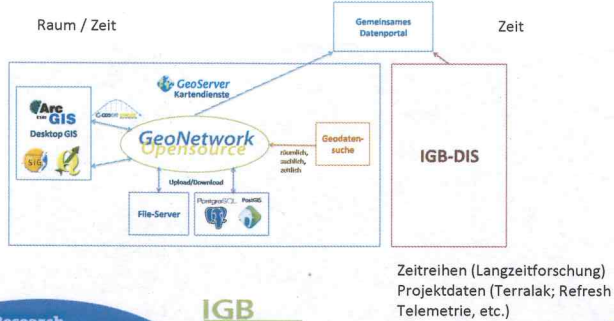
Pakt-Projekt TERRALAC



VISUALIZATION OF Fish Positions in Kleiner Döllnsee (by David March, IMEDEA)



Daten - Management



Genom-Zentrum



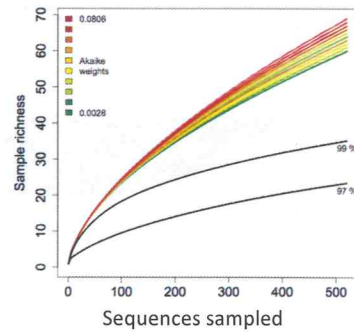
The Consortium

- Botanischer Garten und Botanisches Museum
- Leibniz-Institut für Gewässerökologie und Binnenfischerei*
- Leibniz-Institut für Zoo- und Wildtierforschung*
- Museum für Naturkunde Berlin*
- Institut für Biologie – Freie Universität
- Institut für Biochemie und Biologie – Universität Potsdam



* Leibniz Gemeinschaft

How many bacteria colonize human skin?



Using new analytical methods designed for large-scale data analysis

Using standard methods designed before data-intensive methods were available

(R Powell, MT Monaghan, and MC Rillig, unpublished)

TERRALAC / REFRESH code of ethics

The data collected in the TERRALAC project are an invaluable source of information from which we envision numerous scientific papers to be produced. Many have contributed to the design of the project and the data collection, and we want to manage the use of these data in such a way that contributions are properly acknowledged. Moreover we wish to stimulate intellectual cooperation within the group as much as possible over the coming years. With this dual goal in mind we propose four rules:

1. No publications will be produced without consulting a coordinating committee that will take care that the code of ethics is followed properly, and may help to solve conflicts if necessary.
2. Proposals for publications are posted at the beginning of the writing process (working title, short abstract defining content and main aims) with an implicit open invitation to each member of the TERRALAC team to contribute in the process of defining the problem, interpreting the results and writing.
3. The first author is the one that conceives the idea, coordinates analysis and interpretation of results and designs and writes the major part of the manuscript.
4. To earn a co-authorship one has to contribute substantially to at least two of the four phases in the production:
 - 1) Conception of the idea,
 - 2) Practical contribution to data collection (sampling, measurements),
 - 3) Analysis and interpretation of data and
 - 4) Writing of the manuscript.

The coordinating committee and code of ethics should be agreed upon by the members of the projects. We envision the possibility that in the future new scientists and students will ask permission to work on the data and samples that have been collected. If their proposals are approved those will become part of the TERRALAC network and work according to our code of ethics. We will maintain the coordinating committee after formal parts of the process.



Concerning additional publications/analysis: REFRESH

4. Proposals for additional publications that are not overlapping or competing with already decided publications are posted with an implicit open invitation to each member of the CEE team (see list below) to contribute in the process of defining the problem, interpreting the results and writing. A composite email link of all CEE team members is given on the Refresh homepage at www.refresh.ucl.ac.uk; updated by AU as needed.
5. The first author is ideally the one that conceives the idea, coordinates analysis and interpretation of results and designs and writes the major part of the manuscript.
6. To earn a co-authorship here one has to contribute substantially to at least two of the four phases in the production: 1) Conception of the idea, 2) Practical contribution to data collection, 3) Analysis and interpretation of data and 4) Writing of the manuscript.
7. The order of co-authors is determined by their weighted scores for contribution in each of these phases determined by the first author after consulting the perception of each of the potential co-authors.
8. The CEE_PI group takes the final decision on new papers and on authorships and solve conflicts that may appear. New members of the CEE-PI group shall be reported to the CEE_PI group members.
9. Five years after the end of the REFRESH project (if not stated otherwise by the CEE_PI group) data will become open access.
10. The CEE_PI group will be informed about publications that have been specifically designed as part of PhD Projects. The PhD supervisor group will suggest co-authorship of these publications to be discussed by the CEE_PI group.