



pages-igbp.org/workinggroups/2k-network

Dear 2kers

In this circular we'd like to inform you about the decisions taken during the 2k Network meeting held last February in Goa. We summarize the discussed topics and provide a work structure and timeline for reaching the short- and long-time goals of the 2k project. The highest priority in the coming months for the 2k network will be the expansion of the PAGES 2k centralized proxy database and the collaboration with PMIP towards temperature reconstruction-model comparisons.

This circular also provides information on future 2k meetings and financial support for workshops.

This mail is sent to all 2k mailing list subscribers listed in the "2kEmailAddress.xlsx" file on the "PAGES 2k" Dropbox folder. To keep this mailing list up-to-date, the group leaders are requested to notify Lucien von Gunten of any change in the group composition. Feel free to forward this circular to Working Group corresponding members and interested colleagues. Also let Lucien know if you wish to be removed from the 2k mailing list or if somebody should be added to it.

Best wishes from the 2k-coordinators

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1 - 2K MEETING, GOA 12 FEBRUARY 2013 – SUMMARY, DECISIONS AND NEXT STEPS

Twenty-six 2kers met in Goa in February to discuss the current status and future of the 2k project. Below is a short summary of the meeting and of the main decisions that were made by the plenary.

SUMMARY

Status of the regional groups

The work of the regional groups is greatly appreciated and should continue. In addition to the first 2k synthesis (i.e. pan regional) product on temperature (now in press – see below), many important papers characterizing the regional climate are being published by the regional groups. However, some groups expressed that they need time to reorganize after their large effort for the consortium paper. Specifically, some groups need to apply for funds, to renew their membership and leadership structure, or to develop the methodological expertise to reach their regional goals.

Long-term goals

The long-term goals of the 2k project remain unchanged:

1. Creation of a central 2k proxy database;
2. Reconstruction of regional 2k temperature and precipitation fields and, if possible, reconstruction of circulation patterns and modes;
3. Data-model comparison and diagnostic analyses with the ultimate goal to understand the mechanisms driving climate variability of the last 2k.

Short-term goals – Data-model comparison

To build on the new PAGES 2k regional temperature reconstructions, participants at the Goa meeting identified comparisons with the new PMIP3 simulations as a potentially fruitful direction in the short term. To do so, the PAGES 2k Network proposes to join forces with the Paleoclimate Modelling Intercomparison Project (PMIP, <http://pmip3.lsce.ipsl.fr/>). The product could be a joint review paper on regional data-model comparison or a set of papers focusing on different aspects of the model-data comparison.

Hugues Goosse will act as liaison between 2k and PMIP. In addition, each regional 2k group will be asked to appoint a contact person for regional data-model questions.

The model-data comparison will draw on the existing datasets and completed model runs, so will not require new products right away. The regional groups could use this time to draw breath and re-organize or leverage funds as necessary for the upcoming tasks, such as the regional reconstructions and additional model comparison studies.

Short-term goals - Central 2k database

A lesson learned from the past experience with the consortium paper was that we need a more complete, uniform and easy-to-use proxy database. The preparation of a central database was considered as a most important short-term target since it will be crucial for reaching most of the 2k synthesis goals. See section 3 for more details.

2 - TOPICAL WORKSHOPS

During the Goa meeting it was also agreed that the expertise among the regional groups should be better used and coordinated to reach the synthesis goals. Therefore, in addition to workshops aimed at developing reconstruction products for single regions, participants also encouraged initiatives for topical workshops and started to develop ideas for the topics reconstruction methods, data management or data-model comparisons.

Reconstruction methods workshop

Climate reconstruction techniques must be discussed/developed/coordinated among the regional groups. It was proposed to have a workshop on reconstruction methods this summer. Main topics could be:

- 1) How to quantitatively incorporate lower-resolution, time-uncertain proxies;
- 2) How to reconstruct regional and global climate fields using the PAGES 2k database;
- 3) How to develop an expert assessment of proxy climate sensitivity, to move away from prescreening data from a large, unruly network.

Data-Model Comparison workshop

A joint PMIP-2k meeting on model-data comparison is planned to be held in Madrid in October 2013 (see section 1).

3 - DATA COLLECTION AND DATA MANAGEMENT

As mentioned above, the main goal for the coming months will be the creation of a central 2k proxy database. A unified database will avoid the problems that we were confronted with when preparing the 2k consortium paper and that also contributed to the rejection of the first manuscript version. Both, data selection criteria and methods must be uniform for the trans-regional synthesis products. Once the expanded version of the PAGES 2k database is finalized, topical 2k groups can form and make use of this resource. Such groups would ideally originate from open workshops and work towards new 2k synthesis products.

Data selection criteria

A small team lead by 2k coordinators will prepare a draft of the selection criteria to be used for the global 2k database. This draft will soon be circulated among all 2kers for comment in order to reach a consensus on this central issue.

Format

We encourage everyone to use the new data submission template developed by NOAA in collaboration with the 2k data managers. This will ensure that all records are in the same, computer-readable format and that all necessary metadata are collected. Furthermore, this will allow for an easy transfer of all records to the permanent data archive at NOAA (www.ncdc.noaa.gov/paleo).

Data collection

Once the proxy selection criteria are set, the help of all 2k members will be needed to populate our new database with all of the records that satisfy the pre-defined selection criteria. The regional data managers are currently doing an enormous effort (re)importing all proxy records used in the consortium paper to the NOAA archive according to the new submission

protocol – this will form an important basis of records to start our new data collection. Thanks to the uniform selection criteria, this work can then be continued as a community effort.

Data archiving

Similar to the procedure during the first phase of the project, all data will first be collected internally within the 2k network and its regional groups. As soon as published for the first time, the database will be made publicly available at NOAA as a data product.

4 – SUGGESTED PROJECT TIMELINE

2013

- Update of the 2k data compilations and archiving in central database
- Workshop on reconstruction methods
- Joint PMIP/2k workshop on data-model comparison

2014

- Data-model T comparison
- Release of the central 2k database
- Reconstructions of inter-regional (global, hemispheric, etc.) T patterns

2015

- T field reconstructions by regional groups finalized
- P field reconstructions by regional groups finalized (for Ocean2k ocean circulation?)
- Reconstructions of inter-regional P patterns
- Data-model P comparison as a PMIP/2k collaboration

2016

- Final synthesis (special issue)

5 - 2K CONSORTIUM PAPER ACCEPTED!

We're glad to announce that our 2k Consortium paper was accepted for publication with Nature Geosciences and will be released in the coming weeks. We'd like to thank all contributors for their effort towards this important first 2k synthesis product.

Data archival: All records are available in an excel file in the Supplementary Information of the paper. In addition, all used series are also being (re)submitted to the NOAA archive using the new NOAA import protocol developed by NOAA and the 2k data managers. The deadline for full import is 1st June 2013.

6 - PAGES 2K CALENDAR

25-26 March 2013

Euro-Med2k Workshop, Reading (UK),

www.pages.unibe.ch/calendar/meetings-2013/1-pages-sponsored/284-euro-med2k-workshop

7-13 April 2013

EGU, Vienna (Austria)

In the “Climate: Past, Present, Future” section, some sessions are of interest for 2k members:

<http://meetingorganizer.copernicus.org/EGU2013/provisionalprogramme/CL>

11 April 2013

Arctic2k Meeting, Vienna (Austria), EGU Splinter Meeting

<http://meetingorganizer.copernicus.org/EGU2013/session/13879>

Summer 2013

2k Reconstruction methods workshop (TBA)

October 2013

Joint PMIP-2k data-model comparison workshop, Madrid (Spain)

More upcoming meetings here:

<http://www.pages.unibe.ch/calendar/upcoming>

7 - MEMBERSHIP OF THE REGIONAL 2k GROUPS

Organizational structure of the regional group members:

a) Group Leaders (GL): The GL coordinate the work of their group. They submit funding proposals and organize regional group workshops. They represent their group at the PAGES 2k Network workshops.

b) Group Members (GM): GMs participate in the work of the group. They help to process data and contribute to publications. If required, they can be invited to replace a GL at a PAGES 2k Network workshop.

c) Data Managers (DM): DM's administer the regional proxy datasets. They coordinate the collection, quality assessment and archiving of the proxy data records.

d) Model Data liaisons (MD): MD's are the contact persons for regional data-model questions.

e) Corresponding members (CM): CMs are invited to attend regional workshops. They contribute to the scientific 2k process in an ad hoc way and are not listed in the following table. The comprehensive list of all Corresponding Members can be found online on the respective 2k groups' webpages and on the 2k mailing list file.

REGIONAL GROUP	GROUP LEADERS (GL)	GROUP MEMBERS (GM)	DATA MANAGER
	D. Nash	A. Asrat, S. Grab, A-M. Leziné, S. Nicholson, T. Shanahan, D. Verschuren	B. Chase
	J. Gergis	A. Lorrey, S. Phipps	R. Neukom
	T. Nakatsuka	K. Anchukaitis, H. Borgaonkar, B. Buckley, E. Cook, S. Feng, Q. Ge, P. Krusic, J. Palmer, O. Solomina	M. Sano
	A. Korhola	D. Kaufman, F. Charpentier Ljungqvist, P. Francus	S. Hanhijärvi
	T. van Ommen	H. Fischer, D. Hodgson, V. Masson-Delmotte, L. Thomas, B. Vinther	M. Curran
	J. Luterbacher	U. Büntgen, J. Esper, D. McCarroll, F. Gonzalez-Rouco, F. Ljungqvist, J. Werner, E. Zorita	S. Wagner
	M. Grosjean, R. Villalba	D. Christie, A. Lara, M. Masiokas, M. Morales, R. Neukom, M. del Rosario Prieto, A. Rivera	I. Mundo
	NA	S. Anderson, R. Campbell, E. Cook, H. Diaz, N. Graham, M. Hughes, D. Kaufman, B. Luckman, D. Meko, G. Pederson, D. Stahle, S. St. George, V. Trouet	E. Wahl, A. Viau
	M. Evans	C. Giry, H. Goosse, G. Leduc, B. Martrat, H. McGregor, D. Oppo, J. Tierney, H. Wu	T. Kiefer

The group leaders are asked to report changes in the members list to the PAGES IPO.

8 - MEETING SUPPORT

Regional 2k groups seeking support for meetings can submit a proposal to PAGES (visit [MyPAGES>Meeting Support](#)). The next deadline for proposal submission is 1. May 2013, the one after that will be in fall 2013.