

PAGES SSC 2014 Meeting Minutes

29-31 January 2014

Paris, France

PRESENT

SSC:

Pascale Braconnot (PB – attended 30 & 31 Jan)
Steven Colman (SC)
Hubertus Fischer (HF, chaired day 1 & 3)
Sheri Fritz (SF)
Peter Gell (PG)
Hugues Goosse (HG)
Michal Kucera (MK)
Claudia Latorre (CL)

Ex-officio SSC member/IGBP liaison

Ninad Bondre (NB)

Alan Mix (AM, chaired day 2)
Denis-Didier Rousseau (DDR)
Immaculate Ssemmanda (IS)
Kathy Willis (KW – attended 30 Jan)
Janet Wilmshurst (JW)
Yusuke Yokoyama (YY)
Liping Zhou (LZ)

IPO:

Thorsten Kiefer (TK)
Lucien von Gunten (LvG)

Leonie Goodwin (LG)

Guests: Future Earth representatives

Heinz Gutscher (HG – attended 29 Jan PM & 30 Jan AM)
Diana Greenslade (DS – attended 30 Jan)

Lizzie Sayer (LS – attended 31 Jan AM)

ABSENT

SSC: Chris Turney

1. Introduction and Miscellaneous

1.2 Approval of Minutes from past SSC meeting

The action items from the 2013 SSC meeting were discussed.

DECISION: 2013 SSC Meeting Minutes approved.

2. Finances

2.1 Funding Overview

TK provided an update on the funding proposals submitted to the NSFs (US in Jan 2014 and Swiss NSF in Oct 2013).

PAGES expenditure on track even after accounting for the 2013 OSM/YSM.

2.2 Budget Overview 2014/2105

A budget for 2014/2015 was proposed. The SSC discussed the issue of money spent on science vs money spent on overheads, TK reported that over the long term the money PAGES spends on science has increased as a proportion of the total.

DECISION: 2014/2015 budget approved contingent on the NSF's funding proposals being approved.

3. Review of PAGES Working Groups

General

- The IPO noted that in the past there were more SSC members affiliated with working groups (WG) than at present.
- IPO to begin putting the status of WGs on their webpages, i.e. the length of the current phase. IPO to incorporate question into WG proposal form and ask if follow up phase is intended.
- IPO to continue linking products and meetings and begin doing this for the former working groups' webpages.
- The SSC noted that developing country scientists are not so well represented in the Focus 1 groups.
- All working groups to receive a letter from their SSC liaison confirming how we review their status after the SSC meeting.
- The draft Guidelines for WGs was discussed. **ACTION:** IPO to finalize and distribute.

PALSEA

Workshop scheduled for late 2014 in Scotland. New leadership. May need to sharpen the focus, but PAGES supports its core activities and values; and it's right on track in terms of products.

Sea Ice Proxies

The special issue last year was successful. The meeting in Cambridge in July 2013 established the basis for working together in the future. The next meeting in Bremerhaven in June 2014 will be the last activity needing PAGES support, then the group will work on a synthesis product and sunset. SSC to let SIP leaders know about other WGs that might be interested in exploring synergies.

Global Paleofire Working Group

The leaders are in the process of reorganizing the group, planning workshops, making database improvements and creating products. Will continue to manage the database themselves. Although no final product, they have a very specific plan for the next 2 years; however, this may need to include finite timelines. The coming years could present an opportunity to contribute to applied ideas such as fire management. Group should be encouraged to consider a Future Earth Fast Track Initiative (FTI) application.

Solar Forcing

The SSC have recently encouraged them to include more early-career and international scientists in the group and invite them to the May workshop. The WG is working towards a paper on improved TSI calculation and will sunset after that.

CLIVAR/PAGES Intersection Panel

CLIVAR want to wrap up the intersection panel. See further discussion below in sections 13 & 15.

2k Network

All groups will participate in a second three-year phase with a focus on precipitation and regional reconstructions. The network will work towards a final major synthesis.

There are some questions about some of the groups' plans:

- Africa2k encouraged to hold a meeting in Africa to try and encourage more local involvement.
- LOTRED-SA – focus seems to be moving to tropics. They have a scheduled meeting in Colombia in July 2014. Leadership changes are likely.
- Asia2k – re-invigorating. TK to attend May 2014 meeting to encourage good international representation across the region.

ADOM

ADOM's final product will be the Science Highlight section of PAGES Magazine to be published mid-late 2014, then it will sunset.

Global Monsoon

The group is working towards a big synthesis product in *Review of Geophysics*. It might require another meeting to finish the paper and then it will sunset.

NICOPP

Has been a very good example of a WG. Group is deciding if and how they want to continue as a working group. If they don't make any plans for a meeting in late 2014, then they will sunset.

PIGS

Synthesis community paper coming soon. Sunsetting end of 2014.

SynTraCE

Have been discussing improving their acknowledgments of PAGES and the WG in their products in the future. Will sunset soon.

Regional Integration

A paper emerging from two previous meetings is almost out. There will be a meeting in China in March 2014. This group theme has been well run with limited resources, but a discussion about where to go in the future is needed i.e. should there be more focus on specific aspects of regional intergration and clearly defined products.

Land Use and Cover

Large scope, lots of products. Need to clarify what products it will deliver in the next 3 years. Need to encourage links to the Future Earth agenda.

Biodiversity

The recent success of the “Paleoecology 50 priority questions” workshop was noted, and the success of this model for energizing and engaging the community. Discussed the need to populate the topic with targeted working groups that address some of the priority questions. KW expressed that moving the focus from biodiversity to paleoecology and ecosystem services would better reflect the predominant trends in research.

Soil and Sediment

Published a recent overview paper in Earth Surface Dynamics, an interim product. This theme is open to adjusting it's focus towards opportunities in PAGES that link with Future Earth topics.

General Focus 4 (Humans-Climate-Environment) discussion

Discussed the need to replace the theme structure and encourage more targeted working groups in the Focus 4 space as well as products that can be completed within 3-4 years.

- PG and LG to communicate the SSC's thoughts to the community at the Focus 4 workshop in Leuven, Belgium.
- New call for WG proposals to be publicized widely.
- HITE, LUCIFS, LIMPACS groups to be officially sunsetted.
- IPO to explore Future Earth funding opportunities relating to this focus.

Varves WG

Had a successful session at AGU, followed by their steering group meeting, in which they agreed to sunset after their next group meeting. They also discussed follow up plans for a working group e.g. on hydroclimatic extremes.

4. Review of endorsed and affiliated groups

IMAGES / IMPRESS

SSC discussed the current plans to re-establish a paleoceanographic coordination project called IMPRESS. The SSC will consider endorsing IMPRESS once the structure and goals are consolidated and a formal request for endorsement has been received.

OTHER ENDORSED AND AFFILIATED GROUPS

The SSC briefly discussed the status of the following endorsed groups and concluded that no decisions or actions needed to be taken:

- Arctic Holocene Transitions
- GEO (Group on Earth Observations)
- Glacial Ocean Atlas (Glacial deep ocean circulation)
- ICYS (Ice Core Young Scientists)
- IHOPE (Integrated History and Future of the People on Earth)
- IODP (Integrated Ocean Drilling Program)
- IPICS (International Partnerships in Ice Core Sciences)
- Past4Future (Climate and environment of past warm periods)

See Section 10 for discussion on PMIP.

5. Proposals for new PAGES Working Groups

General

- The SSC agreed that WGs should produce a product after 3 years, even if just an intermediate product or milestone.
- Discussed the possibility of having an additional workshop category “Scoping” or replacing the Open Call category with this category. It would be for groups who need to do a little more work to formulate a WG, but have the definite intention of doing so. Decision to not implement the idea at this point.
- Discussed the character of PAGES supported educational workshop and whether the current Educational category should be replaced by “Capacity Building”. Decision to not implement the idea at this point.
- Discussed the need to align Open Call workshop proposals with PAGES’ ambition of adding value and/or supporting underrepresented groups. It was suggested the SSC devise stricter criteria.

Working Group Proposals

The following WG proposals were approved:

- *WG1 – DICE: Dust impact on climate and environment group*
- *WG3 – Ocean circulation and carbon cycling (OC3)*
- *WG4 – Carbon in Peat on Earth Through Time (C-PEAT)*
- *WG5 – PAGES-PMIP Working Group on Quaternary Interglacials (QUIGS)*

7. Empowering and energizing the PAGES community

Africa

The SSC member from Africa, IS, gave an introduction to the current situation in Africa and the limitations in undertaking paleo research. The SSC discussed ways to empower and build lasting capacity: fostering collaborations, contacting Africans working in ESS outside Africa, trying to improve the reach of PAGES’ advertising, organizing an event for young African researchers to link with more experienced researchers, Africa2k workshop, mentoring program, exploring Future Earth funding opportunities.

Japan

The SSC member from Japan, YY, showed the paleo-geoscience society website, which was established two years ago. The SSC discussed the current situation in Japan, why Japanese representation at PAGES’ OSM and YSM was low, and language issues. The group explored ways to empower and build lasting capacity: ensuring PAGES has representation at the Japan Geoscience Union (JPGU), obtaining mailing lists of the Paleosciences Society, leveraging Twitter, developing a mobile phone app.

China

The SSC member from China, LZ, discussed the present situation in China. The SSC discussed ways to empower and build lasting capacity: PAGES representation at the AGU-like Conference on Earth System Science in July 2014 in Shanghai. Improve social media communication using Chinese sites. LZ reported that the desire to be international among the younger Chinese generation is very powerful.

South America

The SSC member from Chile, CL, discussed the present situation in South America. Interaction between the northern and southern paleo-communities is limited. Most interactions occur between Chile, Argentina and Uruguay. There are no platforms where paleo-scientists meet in South America regularly. They are more likely to meet up at the AGU or EGU. The SSC discussed holding the next PAGES OSM in South America and trying to attract more South American contributors into working groups.

General

There was discussion regarding the lasting impact of holding the OSM in Goa, India, on young local scientists. Until now, no significantly increased involvement of Indian scientists in PAGES activities could be detected, but a few young scientists seem to have taken up emerging opportunities.

8. SSC & EXCOM Membership

One SSC member will be rotating off the SSC at the end of 2014, and another left the SSC in 2013. The candidates elected to replace them were Darrel Kaufman and Blas Valero-Garcés.

SF was elected to the EXCOM.

SF, IS, JW and LZ's first three-year terms will end at the end of 2014. The SSC approved their nomination for a second term.

At the end of 2015, AM, DDR & CT will rotate off the SSC. IPO to initiate a new call for SSC nominations in the second half of 2014.

9. Workshop Proposals

The EXCOM met and decided which workshop proposals to approve. Input was provided by the SSC. See the minutes from the EXCOM meeting on the 29th January 2014.

10. Collaborations with PMIP and INQUA

PMIP

PB reported that PMIP currently has a clear home in WGCM. PMIP has a meeting in May 2014, which will be a good time for synthesis, organizing an external review and for thinking about the future of the project.

INQUA

Discussion on the scientific and organizational relationship between INQUA and PAGES, as well as how they differ from each other.

12. Future Earth

Heinz Gutscher – Scientific Steering Committee Future Earth

HG gave a presentation on Future Earth's approach, particularly its emphasis on co-design, stakeholders, and applied science. Discussion followed regarding nominating people for the Engagement Committee, how Future Earth will contribute to the process of developing the Sustainable Development Goals, and its baseline for success.

Discussed nominating someone for the Future Earth Engagement Committee. Should ideally be people who already are at the interface between science and various stakeholders. PAGES SSC to consider possible nominees.

Diana Greenslade – Science Officer Future Earth

DG presented a Future Earth update. The interim Future Earth Secretariat will close in December 2014. A decision on the location of the permanent Secretariat will be made in June 2014.

To transition to Future Earth, core projects need to submit a statement to the Future Earth SC describing how the project intends to contribute to Future Earth and implement its principles. **ACTION:** IPO and SSC Co-Chairs to work on this.

Future Earth core projects (such as PAGES) will be also required to submit a 10-year science plan.

Future Earth's relationship with WCRP is still evolving.

The current Future Earth funding mechanisms were outlined:

- *Fast Track Initiative (FTI) funding:* Future Earth has US\$1 mil from the NSF for 5 to 10 activities lasting 2 years (around 100k each). Must be a tangible outcome at the end of 2 years. FTI proposals need signatures from two project SSC Chairs. Deadline: 2nd April 2014.

AM and TK submitted two outlines recently at the Future Earth projects' meeting in Washington and joined up to two others. SSC members were nominated to make contact with the various relevant working groups to determine their level of interest in contributing and putting together a proposal.

- *Cluster funding:* Opportunity for the existing projects to build a coalition towards scientific themes or merge projects entirely. Need signatures from two project SSC Chairs. Deadline: 2nd April.
- *Medium-term research priorities:* Belmont Forum has requested a list of mid-term priorities addressing the three Future Earth research themes, which will be published in Sep 2014. The call may happen every year or two. Projects and stakeholders are being asked about their priorities. The Future Earth SSC will then

combine these into a priority list along with input from the Future Earth's projects meeting in Washington in Jan 2014. Deadline: mid-April. **ACTION:** TK to explore the possibility of submitting a mid-term priority funding idea for Africa (see section 7 above).

13. WCRP & CLIVAR

The SSC discussed the letter of support from WCRP, the letter from CLIVAR regarding closing down the intersection panel, and the possibility of co-parentage by Future Earth and WCRP. WCRP's relationship with Future Earth is still being discussed.

PAGES could address many of WCRP's grand challenges and add to their paleoclimate perspective. TK said that WCRP explicitly identified maintaining a relationship with PAGES to be a strategic priority.

WCRP currently has a call out for science committee nominations. (PB will join the CLIVAR SSC this autumn.)

ACTION: SSC to respond to the WCRP and CLIVAR letters. See Section 15 for further detail.

14. Data strategy

EarthCube

EarthCube is a major long-term project (10 years) of the Geo Directorate of US NSF. Earth scientists and IT specialists are collaborating on it. TK attended a data facilities meeting in the US in January 2014. The need for data standards came up a lot, but a strategy wasn't clarified. A contribution to EarthCube, and other data-sharing efforts, e.g. facilitating data standard development would come under PAGES new cross-topical integrated activity, "Data Management".

Earth Cube is calling for proposals by 12 Mar 2014: (http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504780)

Data Standards

MK presented a recommendation for developing data/proxy standards. **ACTION:** MK and TK to develop and pursue a roadmap for developing proxy standards:

1. Develop a general template for proxy data standards
2. Produce a set of 5 different proxy specific data standards (proxies of very different types, with the help of proxy experts)
3. Pass first drafts on to experts to review in an iterative process, include data managers from NOAA, PANGAEA, IODP and ICDP.
4. Once major problems are eliminated stop the iterative review.
5. Put the set of 5 proxy standards to the community for review on wiki-platform and solicit feedback from experts in the PAGES community.
6. Eventually finalize and publish proxy data standards.
7. Solicit additional proxy standards.

15. PAGES' role in IPBES and IPCC assessments

IPBES

There is currently no mention of paleo on IPBES' webpage. Paleo could contribute to work on conservation, assessing, restoration efforts, baselines, stability disturbance rates and regimes of disturbance. Need to contact them and advocate for the need to include paleo-evidence. **ACTION:** SF, PG, JW, KW to pursue.

IPBES have a call for people to populate their committees. Deadline is 28 February 2014. **ACTION:** TK to see if we can nominate someone through IGBP.

IPCC

List of things SSC members feel were missing in the IPCC WG 1 5th Assessment Report:

1. Regions: India, Africa (especially temperature)/ Tropical regions
2. Settings: Synthesis of precipitation especially for last millennia (2k)
3. Processes: response volcanic eruptions (recent climate)
(Volcanic workshop in Bern could be start of activity)
4. Open points: how to compare transient simulations with reconstruction data (e.g. deglaciation) (PMIP)
5. Lack of presence of all the component "tracers" in the IPCC report (or for the current process, or for the paleo) (tracer model data comparisons) (New OC3 WG)
6. For forcing Synthesis carbon soot history (forcing)(Arctic, Tibet ...) (GPWG?)
7. Models for data comparisons, things that can show the relationship between changes in precipitation and temperature changes
8. Temporal change in climate variability
9. Definition of preindustrial. We could work on a PAGES definition of "pre-industrial" based on data. **ACTION:** HG, YY, LvG to pursue.

DECISION: CLIVAR/PAGES workshop request (WG5). The SSC decided to support the workshop requesting it officially analyze and report on the IPCC report and process.

ACTION: Response to WCRP and CLIVAR - IPO to draft letter recognizing closure of the PAGES/CLIVAR intersection panel, inform them of upcoming workshop, and see if we can explore ways to build strong links with WCRP.

16. Implementing the new science structure

A discussion regarding the use of the word "humans" versus "society" in the current science structure diagram had no conclusive result.

Discussed diffusing the hard lines between the climate-environment-human sections to represent the crossover more accurately. The graphic needs to be professionally designed. Suggested we have a high-level version without WGs sketched in.

ACTION: IPO to develop the structure diagram and seek SSC feedback.

Current WG gaps, especially in F4 type area (Environment-Humans sectors)

- Fire
- Land Use – related to climate forcing
- Land use and relationship to carbon cycle
- 2k approach to water or something more integrated that links 2k and water availability, land use, carbon

Cross Topical Activities - Thresholds, warmer worlds, extreme events.

The SSC discussed how to implement the Cross Topical Activities. As they draw on expertise from several working groups, they require central PAGES coordination. PAGES could hold scoping workshops for the integrated activities, perhaps after the next WG proposal deadline in June 2014.

ACTION: HF to contact WG leaders and discuss scoping workshops. Ask if they see potential for their topic to contribute and are interested in attending a workshop, possibly in late 2014. IPO to note.

Publicizing the new science structure

ACTION: IPO can prepare an info sheet on the new science structure and inform WG leaders. Once PAGES gets NSF funding, we go public rapidly.

ACTION: IPO to prepare newsletter piece informing the community about PAGES' direction re: Future Earth, WCRP, and the new science structure.

17. PAGES Products and Communication

Newsletters

The IPO welcomed ideas from the SSC for possible topics or guest editors. More involvement would be welcome.

Discussed some ideas for future issues:

1. Human, climate, environment.
ACTION: CL, JW, LZ to submit a concept to the IPO.
2. ICDP / lake records.

Communications in PAGES

Advertise workshops more actively. **ACTION:** LG to use paleoclim list and get Japanese mailing list from YY.

Workshop deadlines must be communicated earlier, otherwise it is too late for potential participants to plan their attendance. Ideally deadlines should be advertised at least 6 months in advance. **ACTION:** IPO to modify workshop guidelines and contracts accordingly.

ACTION: IPO to implement interactive maps on the website. Explore Google outreach program to see if there is a feasible funding opportunity.

Lizzie Sayer - Communications Coordinator Future Earth

Future Earth intend to follow a hurricane model of communication drawing energy from the projects and activities. An intranet is proposed to link the core projects.

Discussion:

- TK reiterated his belief that Future Earth must have a large and professional communications team in order to achieve its goals.
- Discussed how PAGES and Future Earth can work together on communications in a practical sense.
- The Future Earth Interim Engagement Committee will be discussing the division of tasks between the core projects and Future Earth.
- Internal communications between the Future Earth core projects will be critical. It would be good to have scoping workshops that bring together the different Future Earth communities, as well as a regular conference on sustainability science where scientists can meet and discuss. Need to design ways for scientists to find each other, talk, and develop ideas.
- SSC asked how the Future Earth Communications Department will support Future Earth's emphasis on co-design? The Future Earth Engagement Committee will be exploring this as well as ideas on how to reach new audiences, who might not currently have access.

20. Revisit SSC member charges and responsibilities

IGBP syntheses

To celebrate the closure of IGBP in 2015, a number of products have been proposed. PAGES will be contributing as outlined below:

1. The Anthropocene – This will comprise a paper plus public outreach. John Dearing is the PAGES representative on the writing team.
2. Earth System Science in IGBP over the last two decades. This will highlight IGBP's contribution to the ESS field through a suite of papers for a high profile journal, and will be accompanied by outreach. TK is the PAGES representative on the writing team.
3. A summary of PAGES' achievements as one of the IGBP core projects will be published in a journal.

ACTION: IPO to prepare an outline of possible PAGES achievements. SSC to provide feedback.

21. Next SSC Meeting

CL will host the next meeting in Chile in early 2015.

ACTION: IPO to arrange SSC meeting and associated symposium program with CL.