Project Outcomes

Outcomes are results of the activity that produce an effect on the overall communities or issues you serve. Outcomes include the advancement of science and cultural, economic, policy and societal effects. For example, an outcome may be a change in governance policy based on recommendations from field research.

They are gathered in categories : advancement of knowledge sciences, advancement of other knowledge, cultural or economic effet, models, societal or policy effect and then need to tell if it is with other pojects, stakeholders . For what we do in PACMEDY I propose the different classes below (include the needed entries + for each of them a very short paragraph telling (what academic disciplines were affected; how has it been used or implemented by the stakeholder; how has it been used or implemented by those outside the project team; how has it advanced knowledge; what economic, social, or policy effect has it produced)

Advancement of knowledge

indicate here mostly outreach or large audience synthesis, contributions to international WCRP or Future Earth working groups, or others pacmedy contributions to new national call for example or product that will use outside the community targetted by this JPI-Bemont call (database and publications are in outputs)

- Contribution to WCRP grand challenge on Climate sensitivity, circulation and clouds
- Contribution to WCRP grand challenge on Weather and Climate Extremes
- Participation in WCRP lighthouse activities workshop

- Contribution to PAGES working group :

PAGES-SISAL. PACMEDY has supported the creation of the PAGES SISAL working group database. This is a global compilations of δ18O and δ13C records from speleothems that can be used to document climate changes over the Holocene and on glacial-interglacial timescales. PACMEDY has also supported workshops of the PAGES SISAL working group to discuss and promote analyses of these data. The first version of the SISAL database was published in Earth System Science Data (see project publications) and the second version of the database is currently in ESSD Discussions.

PAGES-Iso2k. Datasets produced by PACMEDY and PACMEDY members contributed to building the Iso2k Database: A global compilation of paleo-δ18O and δ^2H records to aid understanding of Common Era climate. This is the first global-scale collection of water isotope proxy records from multiple types of geological and biological archives. It is suitable for evaluating hydroclimate processes through time and space using large-scale synthesis, model-data intercomparison and (paleo)data assimilation. The database has been submitted to Earth System Science Data.

PACMEDY has been active in the PAGES LandCover6k Working Group, specifically to promote the compilation of land use and land cover data that can be used as inputs to climate model simulations to evaluate the impact of anthropogenic activities during the Holocene.

PACMEDY played a key role in the PMIP4 working group on “Past2Future: insights from a constant varyingly past”. This included substantial participation in a London Workshop in May 2019. PACMEDY ended up leading two of the key papers emerging from the workshop.

- large audience publications

PAGES newsletters

Harrison, S.P., 2017. The big data revolution and paleoecology. Past Global Changes Magazine 25: 96-97.

Comas-Bru, L., Deininger, M. Harrison, S.P., Bar-Matthews, M., Baker, A., Duan, W. and Stríkis, N., 2017. Speleothem synthesis and analysis working group. Past Global Changes Magazine 25: 129, DOI:10.22498/pages.25.2.129.

Harrison, S.P., Stocker, B.D., Klein Goldewijk, K., Kaplan, J.O., Braconnot, P., 2018. Do we need to include anthropogenic land-use and land-cover changes in paleoclimate simulations? Past Global Changes Magazine 26, https://doi.org/10.22498/pages.26.1.4.

Harrison, S.P., Gaillard, M.-J., Stocker, B.D., 2019. Co-designed paleo experiments on land-cover and land-use change impacts. Past Global Changes Magazine 27, doi.org/10.22498/pages.27.1.38

Stakeholder

Contribution to other project

- Contribution to the international Paleoclimate Modeling Intercomparison Project
- Contribution to the German BMBF PALMOD project
- Contribution to the German BMBF ROMIC project

organisation of conferences of workshops on PACMEDY subjects

* workshop organised by Mary Elliot (Mary include the conf + link to conf website + info/different types of documents produced after the conf here)

Collaborations outside PACMEDY consortium on PACMEDY results or products

- collaboration between LSCE and Fabrizio Falasca (Caltech, USA) on the use of artificial intelligence methodes for the analyses of long transient simulations.
- collabortion between MPI-M and HZG with Andrew Lorrey (National Institute of Water and Atmospheric Research, New Zealand) on proxy-Model comparisons for New Zealand spelothems.

societal or policy effect

- Participtation to the AR6 WG1 IPCC report :

Hegerl: Review Editor, Chapter 1 “Framing, context, methods”

Krishnan: Coordinating Lead Author, Chapter 8 “Water cycle changes”

Braconnot: Review Editor, Chapter 8 “Water cycle changes”

Sabin: Chapter scientist, Chapter 8 “Water cycle changes”

Brierley: Contributing Author, Chapter 3 “Human influence on the climate system” - relating to PACMEDY publication