

LC6k Data sharing and publishing - version to be distributed

Version compiled by MJ Gaillard (16-05-2019, edited by Chad Hill September 17, 2020) taking into account edits and text contributions by Marco Madella and Nicki Whitehouse, and comments by Kathy Morrison, Marc Vander Linden, and Sandy Harrison

1. Data sharing policy

Two types of data

A. raw data (e.g. pollen data, 14C dates) and “expert knowledge” data (from literature, e.g. per capita land-use estimates) needed to produce any map or look-up tables

B. processed data: inferred data from A that enables the production of maps and look-up tables, e. g. REVEALS estimates of plant cover, land-use polygon data/layers of land-use data, estimates of % land use (LU) for a particular LU category, data to map first agriculture, etc. These processed data may also be further transformed and amended under guidance from the producers of Data A types, so the end product may be an iterative one based on combined A and B datasets.

Data publishing and depository

Data of type A are often from databases but are not necessarily public. When non-public data and expert knowledge are used to produce a map, the publication of the map falls under the publishing policy of the working group (LandCover6). The Data of type A (unpublished ones) and B should be published in a “data paper” as soon as possible. Once the maps and look-up tables are published, they should become public and be submitted to a data repository. E.g. REVEALS estimates of plant cover are published in PANGAEA. LU data will be published primarily in “data papers”, but LU collaborators should also consider publication in PANGAEA.

Data sharing with ALCC and climate/carbon budget modellers

Data sharing with ALCC and climate/carbon budget modellers will be undertaken by each LC (REVEALS land-cover data) and LU regional group, where sharing unpublished data. Where sharing published or accepted for publication data this process can be handled either by the regional group or the LC/LU global co-ordinators, as agreed between the two groups. The relevant LC/LU global co-ordinators should always be involved in the discussions over data sharing (either unpublished or published data) and copied into correspondence and vice versa, so that both the regional groups and global co-ordinators are fully informed. Where data are shared for larger geographic regions or where data are shared via the LU database, the transfer of data will be undertaken by the global LU co-ordinators, working together with the LU regional groups.

2. Publishing policy

TYPES OF PAPERS

The LC6k working group may produce five types of publications:

1. General LandCover6k publications (with presentation/discussion of **both LandCover and LandUse aspects/data OR either/or but in this case with ALCC and/or climate modelling aspects**)
2. Strictly **pollen-based LandCover** publications (**large geographical scale**: major country to subcontinent/continent/hemispheric/global)
3. Strictly **archaeology/history-based LandUse** publications (**large geographical scale**: large country (e.g. China, USA, Russia) to subcontinent/continent/hemispheric/global)
4. **Regional** (small geographical scale, part of a country/smaller country level) **LandCover and LandUse** publications
5. Publications using **products from LandCover6k**

These 5 types of publications can also be about methodological aspects that concern both LandCover and LandUse together, or strictly LandCover or LandUse, and they can be at different spatial scale.

RULES

ACKNOWLEDGEMENTS FOR FUNDING BODIES/PROJECTS

- a) All publications types (1 to 5) should acknowledge the LandCover6k working group and **PAGES (IMPORTANT! PAGES SSC will accept a publication as a product of LandCover6k ONLY if PAGES is acknowledged in the paper!)** with the following text: *“This study was undertaken by LandCover6k (or as part of LandCover6k), a working group of the Past Global Changes (PAGES) project, which in turn received support from the Swiss Academy of Sciences and the Chinese Academy of Sciences.”* If you would like to include the former supporters - the US National Science Foundation and the Swiss National Science Foundation - please do. You can add either or both. It is up to you to decide if it is relevant to add the past supporters, but the Swiss Academy of Sciences (SCNAT) and Chinese Academy of Science (CAS) should always be mentioned. If you add the US National Science Foundation and/or the Swiss National Science Foundation, it/they can be written before SCNAT and CAS.
- b) If all or part of a publication arises from funds also from other sources (e.g. INQUA, universities, projects financed by other research councils, etc.), these bodies must be acknowledged too. The text should follow (but can also precede) the acknowledgement to PAGES and can be: *“Funding for this study was also provided by (name of funding body(ies)).”*
- c) Whenever there is doubt on the type of publication (see points 1 to 5 above), the first author should contact the LandCover6k Coordinating Group for advice.

AUTHORSHIP

Rule for all types of papers

The first author **MUST** discuss the authorship policy with **ALL collaborators well in advance** of the writing! Anyone who has contributed substantive data, discussions, analyses or writing of manuscripts from global or regional LC and LU groups should be included as authors; the order of authorship should be based on the level of contributions.

Specific rules on authorship and acknowledgements for the global coordinators

Type 1: all members of the global coordinating group are co-authors (unless one of them is first author) as long as they participate in the design of the paper and their participation gives a significant input; the order of co-authors will depend on the level of contribution.

Type 2: all “LandCover coordinators” (Andria Dawson, MJ Gaillard, Esther Githumbi and Furong Li) of the coordinating group are co-authors (unless one of them is the first author), as long as they participate in the design of the paper and their participation gives a significant input; the order of co-authors will depend on the level of contribution.

Type 3: all “LandUse coordinators” (Jennifer Bates, Oli Boles, Emily Hammer, Chad Hill, Marco Madella, Kathy Morrison, Eduardo Kazuo Tamanaha, Nicki Whitehouse, and Marc Vander Linden) of the coordinating group are co-authors (unless one of them is the first author), as long as they participate in the design of the paper and their participation gives a significant input. MJ Gaillard can be added as LandCover6k overall coordinator if relevant, either as co-author or in acknowledgements; the other members of the coordinating group can be mentioned in acknowledgements, if relevant; the order of co-authors will depend on the level of contribution.

Type 4: “LandUse coordinators” (Jennifer Bates, Oli Boles, Emily Hammer, Chad Hill, Marco Madella, Kathy Morrison, Nicki Whitehouse and Marc Vander Linden) in acknowledgements for “LandUse I papers”, some as co-author if relevant. “**LandCover** overall coordinator” MJ Gaillard in acknowledgements for “**LandCover** papers”, as co-author if relevant.

Type 5:

- **If Land-Use product:** “**LandUse** coordinators” Jennifer Bates, Oli Boles, Emily Hammer, Chad Hill, Marco Madella, Kathy Morrison, Nicki Whitehouse and Marc vander Linden in acknowledgements. It should be offered co-authorship to LU and LC coordinators if they were part of the development process and their participation gives a significant input (e.g. some LU and LC coordinators participated in several different geographic workshops, giving feedback, helping organising them, etc.).

- ***If Land-Cover product:*** “LandCover” overall coordinator MJ Gaillard in acknowledgements for LandCover papers, as co-author if relevant; other LandCover collaborators that contributed to the LandCover product as co-authors when relevant. It should be offered co-authorship to LU and LC coordinators if they were part of the development process and their participation gives a significant input (e.g. some LU and LC coordinators participated in several different geographic workshops, giving feedback, helping organising them, etc.).