Interactive comment on “A guide for digitising manuscript climate data” by S. Brönnimann et al.

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GENERAL COMMENTS

The discussion paper contains useful advice in the development of protocols of the digitizing manuscript climatic data. Such protocols will ensure the international scientific community that climatic data from various countries have been processing according to commonly accepted procedures. Publishing this paper in the CP journal will stimulate the interest on the development of formal procedures of processing qualitative and quantitative climatic data and lead to substantial amount of new data from “countless archives” of various countries to be made available.

The main problem of the discussion paper is that it is not well structured. For instance, the aim of the work is not clear, Abstract and Summary contain elements which are contradict each other.
SPECIFIC COMMENTS

A. Reviewer’ basic concept I would like to present my point of view on the development of the protocol of digitizing manuscript climate data in order to justify my comments.

Let’s define two different categories of databases, for which manuscript climatic data may be digitize for different purposes.

Category #1. Manuscript climate data has to be digitized for the development of a multitask database.

Category #2. Manuscript climate data has to be digitized in order to solve a specific problem or a specific category of problems.

In case of a database of the Category #1, the word “the multitask database” clearly define the responsibilities of the database’ manager and user. The database manager is in charge of the presenting metadata and data into to database without errors in the form allowing the user to decide what portion of the data within the database is suitable for the solving his specific problem. Thus the user and only the user of the database is in charge of the judgment about the quality of the data with the respect to his specific task. So, a statement like the following “Digitizing such data is a labor intensive undertaking that is often associated with a risk of a “no result” (data quality does not meet scientific requirements)” (page 193 lines 22-24) is not applicable for the development of a guide for digitizing data for the multitask database.

In case of the database of the Category #2, the database manager has the same responsibilities as in the case of the Category #1, plus she or he is in charge of the description of the problem or category of problems the database is developed for. The important element of such description is the set of quantitative and/or qualitative criteria that allows a user to make a decision about the possibility of database for solving the user’s own problem.

B. Comments about the title of the paper The key word of the title is “A guide”. Thus,
I’m expecting to get a list of rules that allows one to properly process manuscript historic data. But I can’t find this list of rules in the paper. Section “Summary” (page 200) contains the list of questions that allows one “to digitize data correctly, quickly and inexpensively” and “save the time and trouble” (page 200, line 19). Answers to these questions are important for the development of procedures of the digitizing of manuscript climatic data. But these questions are not “A guide”. At the same time the existing title sound attractive. Thus, I recommend keeping the title of this paper unchanged and adding a list of recommendations for digitizing manuscript climatic data. For instance, one of the rule could be the statement made on the page 196 lines 9-11: “Find people at the corresponding archives that are willing to provide sample photocopies of the data sheets in advance”.

C. Comments about the aim of the work. Here are reasons why I would like to recommend authors to present aim of the work in more precise terms then they did in the discussion paper.

Reason #1. The aim of the work presented as follows (section Introduction, page 193, lines 7-9): “Following our publications we have repeatedly been contacted by other research groups concerning our experience with different techniques. In this paper we would like to share our experience”. From this statement it is clear what the authors are going to present in their paper, but it is unclear how it is possible to check that the goals of the paper are reached.

Reason #2. Authors emphasize in the Abstract and in the Introduction that “data quality” is the main concern of the paper and discussed the quality of data with respect to solving the authors’ own problem. Thus, the authors would like to digitize manuscript climatic data for the database Category #2. If it is true, then the authors have to describe their own problems and explain why “digitize historic upper-level data from various sources” (page 193, lines 2-5) allow authors to avoid “of a high risk of a “no results” (data quality does not meet scientific requirement)” (page 192, lines 23-24)
Reason #3. The Section Summary starts with the following sentence “In order to optimize the overall goals, i.e. to digitize the data correctly, quickly and inexpensively and to preserve the meta data, considering the following questions”. Authors presented 7 questions after this statement. Because none of these questions deal with data quality, perhaps the authors would like to digitize manuscript climatic data for the database Category #1. Thus, statements about data quality in the section Introduction and in the Abstract are in the conflict with the statement in the section Summary.

D. Suggestions 1) I would like the authors to explain why they “would like to categorize the most important properties of manuscript data” (page 193, lines 11-12) with the respect to the aim of the paper.

2) In order to allow readers to understand the basic concept of the discussion paper, I recommend the authors to formulate assumption or assumptions and limitations of the proposed methods of digitizing manuscript climate data.

TECHNICAL CORRECTIONS Because English is not my native language, thus I can’t be the expert in typing errors, etc.