Author's response to reviews and short comments of the paper:

Brief communication: Getting Greenland's glaciers right – a new dataset of all official Greenlandic glacier names

A. A. Bjørk[1], L. M. Kruse[2] and P.B. Michaelsen[3]

[1]Natural History Museum of Denmark, University of Copenhagen, Copenhagen, Denmark

[2]Oqaasileriffik – The Greenland Language Secretariat, Ministry of Culture, Education, Research and Church, Nuuk, Greenland.

[3]Danish Geodata Agency, Danish Ministry of the Environment, Copenhagen, Denmark

Correspondence to: A. A. Bjørk (andersb@snm.ku.dk)

We are very delighted by the warm welcoming the presented dataset has received from the glaciological community, and this has confirmed us in the belief that this dataset is needed and will be used.

We have received two insightful reviews from H. Jiskoot and J. Yde, whose time invested and comments have greatly improved the manuscript. Below is a point by point reply to these comments and suggestions. Authors reply and comments are in red font.

A. Pope along with both referees suggested that the dataset should be hosted on a permanent web platform. This has been done, the data will be published under a Creative Commons (CC0) license and a link to *Figshare* with a permanent DOI can be found in the final version of the paper.

K. Mankoff suggested including in essence a dictionary of Greenlandic place names. This we have not included as it would not be within the scope of this Brief Communication, instead we provide a link to an already available English-Greenlandic dictionary here:
http://www.oqaasileriffik.gl/en/resources/greenlandicenglishdictionary

Reply to reviewer #1
(H. Jiskoot)

A. DATA FORMAT

1) The database should have a electronic spatial component to it: for example a GIS or KML layer (also suggested by A Pope) and/or a direct link to the GLIMS, Randolph or WGMS glacier IDs (see also under 2, and e.g. Weidick et al., 1992; Raup et al., 2007; Pfeffer et al., 2014;). Alternatively, a direct link could be made to e.g. http://www.nunagis.gl/en/kulturhistorie/19-stednavne/439-stednavne-en?cat=19, where all official names should occur on the map.

Author comment: we agree with the comment by A. Pope and the reviewer that the database should also have an electronic component – and should have a permanent online hosting. We have now added the updated dataset in a GIS file and a KML layer, and the data set and future versions will be hosted at *Figshare* with a permanent DOI. We will supply the permanent link once the final paper is online, but attach all the supplementary files to this response. We also add links in the text to the Randolph Glacier Inventory (RGI)

2) To enable better cross-referencing with existing glacier inventories, the database should have a column with one or more of the following glacier IDs: WGI, GLIMS, or Randolph inventory.

Author comment: See reply to point 4 below.

3) The database should indicate whether a name refers to a part/outlet of the Greenland ice sheet, or one of the local glaciers: I suggest to add a column for this binary information.

Author comment: we have now added a column with information on the glacier is an outlet of the Greenland Ice Sheet or a local glacier – distinguishing between the two is not trivial, and we have decided to use the differenciation presented in the RGI, to include glaciers also connected to the ice sheet but with a unique catchment..

4) It is unclear what criterion was used for the geographic location of the name. Both GLIMS and the Randolph glacier inventory use the centroid location of glaciers for IDds/names, but I assume the names in this manuscript is closer to the glacier margins. In order to be useful the official NAA/GDA lat-lon location for the glacier names should be as close as possible, or ideally correspond exactly, to these glacier inventory ID locations.

Author comment: We have now added the GLIMS and RGI IDs and coordinates from the RGI polygon center to the database. We have however also kept the original coordinate – the reason for this is that the GMLIMS and RGI coordinates refer to the center point of a polygon representing a body of ice – which in many instances can have multiple glacier lobes. It is in most cases the glacier lobes that are named and a precise point location on the lobe will be of greater value for identifying the specific place name rather than the center of the ice cap – as a consequence we now have coordinates for both in the dataset. We now also give a better description of the location of the place name in the dataset.

5) The supplement list should be available online and updated electronically; else it will become obsolete almost at the time of publication. For example, create a link to a dynamic supplement, e.g. on the NAA/ Oqaasileriffik (http://www.oqaasileriffik.gl) or the GDA (http://eng.gst.dk/) site.

Author comment: see reply to point 1. Also with time, the glacier names dataset will be uploaded and updated on the NNA/NUNAGIS and GST web map interfaces.

6) Add the essential metadata (e.g. format info, contact information, version date, link to this publication) directly on the Supplement datafile. Also present in an alternative format (e.g. ASCII) that can be directly incorporated into e.g. a GIS or matlab. Be absolutely clear in the header which name is the (most) official.

Author comment: We have now added a field in the database with the official name. The dataset is delivered in xls spread sheet, a CSV, and as an ESRI shape file. All files will be uploaded to a public data repository, where future updates also will be uploaded.

7) I suggest adding the official name for the Greenland ice sheet (Inlandisen) in the same format as for all other glacier names. Also add this to the manuscript text.

Author comment: we have not added the name for The Greenland Ice Sheet (Indlandsisen), as it is not incorporated in the official list of place names. But it will be added to the list of names that will be taken under consideration of the official Place Name Committee.

B. PAPER

1) The paper should have more substance: numbers 2-6 include my main suggestions for improvement.

Author comments: see comments and corrections in sections below

2) The introductory paragraph should already reference essential literature on the place names of Greenland glaciers, as several publications over the years have addressed this issue. Although some essential literature is included (e.g. Higgins, 2010), others are not Weidick, 1995; Rignot & Mouginot, 2012).

Author comments: we have now included the suggested references and one of Laursen (1972)

3) Whereas the historical changes in Greenland glacier and placenames are unique due to the many different languages used for unofficial names in Greenland and changes in Greenlandic language and spelling over time (Higgins, 2010), almost every glacierized region in the world has similar glacier name issues, in part because of international boundary issues, changes in glacier delineation and fragmentation, and albeit often over longer timespans (e.g. Rott et al., 1993; etc.). Is there a way to put this work into a better global context, e.g. by suggesting good practice from this effort, or pointing out good practice already applied to a particular region (Antarctica, China, Himalayas, Alps?)

Our suggestion for future good practice of using glacier names, is to acknowledge the official Greenlandic name whenever one is available. It is not our intention that scientists should stop calling it Jakobshavn Isbræ, since this is widely used and well known. This is also further elaborated in the text.

4) Make a direct connection to the presently most completed set of Greenland glacier units (Rastner et al., 2012 or Pfeffer et al., 2014). I suggest to add to the abstract and to section 3 ‘A new dataset of Greenlandic glacier names’, the total number (and percentage) of officially named glaciers compared to the total number of glacier units from the Randolph inventory (Pfeffer et al., 2014). Also, indicate how many of the names in total are for outlets/regions of the Greenland Ice, and how many are for the local glaciers.

We have now added this information to the abstract and to section 3.

5) The map in Figure 1 is not very informative. Look for example at Figure 2 of Rignot & Mouginot (2012), and see if it possible to scale up your map and show the exact locations and official names of the 100 largest/most-studied glaciers on the map. Alternatively, link to the electronic databases as suggested in A1, and show a full map with names for a spatial subsection.

We have now updated the map in figure 1 to include a subdivision of local and ice sheet glaciers, and made an additional zoom in, show an example of the glaciers with the information available in the dataset.

6) The use of the English language is variable throughout the manuscript, and much of the text is repetitive and could be shortened. I suggest having it checked and improved by a proficient native speaker.

SPECIFIC MINOR COMMENTS:

P1594
Abstract: needs to be rewritten and phrased in an active and direct manner, and contain more concrete information.
We have now rewritten and added to the manuscript

L6-22. The writing in this section is vague and could be shortened to half, and yet enriched with references and put into a more global/general context. See also B1-2 above.

We have now shortened this as much as possible and added further by suggestion of another reviewer.

L15: Instead of the colloquial 'their favorite' I suggest rephrasing as 'intensively studied and unofficially-named'
This has been changed

L23: Here, for example, the sentence should be changed to 'was given'.
This has been changed

P1595
L2-3: Add the URLs for both authorities (NAA and GDA).

URLs have now been added

P1597
L4: Can you explain some of the procedures for erasing double entries, and replacing misplaced data points?

This is now further elaborated in the text

L8: glacier names

This has been changed

L17: "or has been discarded in the past": by whom and can you give an example?

We have now added a paragraph to the end of the section describing such an example.

P1597
L1-12: I think rather than taking a passive role and waiting for glacier names to be recommended by the glaciology community, the NAA could take a more active role and extract some of the names from the seminal publications, including some of the references given below (in particular Weidick's 1992 / 1995 papers; Rignot & Mouginot, 2012), as well as by incorporating recent glacier inventories (Rastner et al., 2012; Pfeffer et al., 2014).

This process is also underway, but due to limited personnel and a vast array of obligations in the NNA, such a review of the historical literature cannot be made, this is why we hope that the scientific community with its extended knowledge on the literature can help bring the NNA to the attention of these glacier names.
We have now incorporated the recent glacier inventories in the glacier names database.

L19: Please give a URL or email address (perhaps one of the co-authors offices) for further enquiries or for feedback when finding mistakes.

URLs have been added in the introduction.

Table 1:
- Neither in the supplement data nor in this table do I see unique database IDs. Am I missing something?

This is a mistake. The unique database ID is now added. Entry points are labeled GGN0001-GGN0733 (GGN for Greenland Glacer Names)

- I am not sure, but I think the choice of the UTM notation needs to be better justified. I understand that you are using UTM zone 24. Add N-North for clarity. I have two questions about the negative eastings: 1) Plotting negative numbers for locations that are outside this UTM zone will only project properly when within 20 degrees of the centroid of the UTM zone for which the projection is defined: outside that contortions will occur. Did the authors consider this? 2) Negative easting can cause plotting problems in certain programs. This can be solved by either assigning an arbitrary number to the centroid, or by notating each zone in full (add a specific UTM zone column) with the corresponding zone easting and northing for each location. I suggest the second choice be implemented.

You are right about distortion using a single UTM zone, which for Greenland can amount to c. 50 meters for the land areas furthest away from the UTM24 center. We have now deleted the UTM coordinates, and supply coordinates in decimal degrees for the original points and for the RGI center coordinates. We prefer to supply coordinates in a single coordinate projection of the ease of the users of the dataset.

Reply to referee #2

J. C. Yde (Referee)
jacob.yde@hisf.no

The number of publications on glaciers and other cryospheric phenomena in Greenland has increased significantly in recent decades. At the same time, the political system in Greenland has changed and so has the use of Greenlandic place names. However, this linguistic development is not reflected in the growing international scientific literature on glaciers in Greenland, and available information on the internet is not very helpful. Hence, it is very relevant to inform editorial teams of cryospheric journals and researchers, who work in Greenland or apply Greenlandic glacier data, about the correct use of Greenlandic place names in international literature.

Reviewer Hester Jiskoot has already made some excellent suggestions for how the database and paper can be improved, so there is no reason for me to repeat these. However, I do find the usefulness of the data rather limited. The database only contains information on 733 glaciers out of approximately 20300 Greenlandic local glaciers and ice caps (Rastner et al., 2012) and hundreds of outlet glaciers from the Greenland Ice Sheet/Indlandsisen (?). A more useful database would include all glacier names shown on the 1:250,000 topographic map series with updated orthography and correction of misspellings, and an indication of whether the name is official or unofficial.
Below I have listed some suggestions for improving the impact of the paper and database:

CHAPTER 1

1. It seems relevant to mention in this context that there is precedence in the international scientific literature for using local glacier names (e.g. Vatnajökull, Longyearbreen, Storglaciären, Aletschgletscher, . . .). Hence, there is no excuse for not using official Greenlandic names internationally.

This is an excellent point, and one that has now been highlighted more clearly in the text.

2. If it is the official recommendation from NAA, then just say it straight out: Do not anglicize Greenlandic glacier names. Then, we will know that we should not write Helheim Glacier, Petermann Glacier etc. in international publications. The primary aim of this communication is to change the way that researchers spell Greenlandic glacier names. Then we need to know, what we do wrong, and how we should do it correctly.

It is not the intention of the NNA that foreign names should not be used. For the examples Helheim and Petermann, there are no Greenlandic alternatives. Our recommendation is that whenever a glacier has an official Greenlandic name, this is used, and if applicable in conjunction with the foreign name, which is known by the scientific community.

Besides this point, the idea with this publication is also to 1) help researcher find the location of glaciers names found in the historic literature, and 2) with the support from the scientific community gather glacier names from the scientific literature which in time can be adopted on he list.

3. It is also worth mentioning that the widely used USA National Geospatial-Intelligence Agency GEOnet Names Server (http://geonames.nga.mil/gns/html/index.html), which includes official geographic names authorized by the United States Board on Geographic Names (US BGN), has not been updated by the most recent (i.e. last 20 years) changes in Greenlandic orthography and single authorization of place names, and this database contains errors (e.g. that Russell Glacier is a variant name of Isunnguata Sermia).

We have now added information on the alternative name list in section 1.

CHAPTER 2
The latest and most relevant changes of Greenlandic place names are not included in the text. I think that many readers of this paper will find information about these changes interesting.

1. Insert 1-2 sentences about the language reform of 1973 and exemplify the new orthography by the common misspelling of Kangerlussuaq Gletsjer (old orthography: Kangerdlugssuaq Gletscher).
This is a good and important point which we now have added.

2. In 1996 single authorization of place names was introduced in Greenland, so that the many places, which previously had both official Greenlandic and Danish names, now only have an official Greenlandic name. For instance, the only official name of the ice stream, which in scientific literature often is referred to by its old name Jakobshavn Isbræ, is Sermeq Kujalleq.
This information has also been added

3. In 2001 the word gletsjer became the only official way to spell glacier in Danish. This change was implemented in Greenland by NAA. This could be exemplified by Helheimgletsjer (old spelling: Helheimgletscher). It is very important to emphasize this change in the text, as researchers almost never use this new spelling of glacier names in scientific literature.
This information has also been added

4. It will also be very useful for many colleagues and editorial teams to know that in 2008 the Greenland Home Rule (now Greenland Self-Government) approved a new law that divides Greenland into three official regions: West Greenland (Kitaa), East Greenland (Tunu) and North Greenland (Avannaarsua). These three regions should be used, when researchers refer to the location of glaciers, instead of the old colonial

division of Greenlandic regions that is applied in scientific literature today (see e.g. Encyclopedia of Snow, Ice, and Glaciers, page 479, figure 1). Please add these regions to Figure 1 and to all online maps (see comments by Hester Jiskoot).

We have decided delete this information from the dataset and leave it to the scientist to describe the region in a way that fits with the purpose, partly because the present Greenlandic division has a region (Sermersooq) that encompasses both east and west Greenland.

CHAPTER 3

1. I could only find two ice caps in the database (Sermersuaq and Flade Isblink). I was under the impression that more ice caps have official names. Could you please recheck whether this is correct? Anyway, make a comment (maybe in a new column) in the database that these names refer to ice caps.

We have checked, and the database is correct, however to the best of my knowledge no inventory of ice caps and glaciers has been made, thus determining which is which is quite objective. We have added a column with information whether a name belongs to an outlet of the Greenland Ice Sheet (GrIS) or a Local glacier or ice cap (LGIC) as determined by the Randolph Glacier Inventory.

2. What I really miss in this paper is a set of recommendations on what we as researchers should do, when we want to name either an unnamed glacier or an unofficially named glacier is our publications. With approximately 20000 glaciers without an official name, this issue will continue to exist for decades. We would like to know, what NAA (or Oqaasileriffik) wants us to do. For instance, (1) should be use the unofficial names from the 1:250,000 topographic map series; (2) if so, should we update the orthography and correct misspellings; and (3) should we use “Sermia”, “Gletsjer” or “Glacier” as part of the name, when we name a previously unnamed glacier in a publication?
We have now made this recommendation more clear in the text

3. The idea of inviting the scientific community to send you suggestions of glacier names (with references) may seem appealing at first, but local use of glacier names and historic glacier names should have precedence over glaciers named by the scientific community. How do you think that people in a Greenlandic village will react if a glacier close to their village suddenly is given an official name by some foreign researcher, who has named the glacier in a remote sensing study? I don’t think that this is the way to proceed. I suggest that you compile the unofficial names of glaciers and ice caps used in the 1:250,000 topographic map series, update the orthography and correct misspellings, and then send the list to NAA. NAA will most likely need a long for carefully checking every single name and make decisions. Thereafter, it will make sense to add more names to the list by asking the local population and check historical and scientific literature. Also, it is relevant to record the meanings of glacier

names for cultural history reasons. Otherwise, we may end up in the same situation as the astronomy community in 1988, when they had to establish a group of scientists to compile a database of the meanings of asteroid names (Schmadel, 1992).

With this request to the scientific community, it is not the intention of the NNA that scientists should start naming glaciers from scratch, but rather contribute with information of glaciers already named in the (historic) scientific literature. Everyone is however free to suggest new names for geographic locations, but these suggestions will go through the control at the board of NNA and will have to live up to suite of requirements (see: http://www.oqaasileriffik.gl/en/oqaasileriffik/placenamescommittee). This way there will not be any new / foreign names forced on the local population. Likewise any suggestions from the historical literature will have to go through the same process.
It is a good idea to establish a database with unofficial names, as a supplement to the present. This is a work in ever progress, that starting now with the publication of the list of official names, but it is out of the scope of this publication and will require a huge amount of work. This is also why we hope to be able deliver a list of unofficial manes and expand the list of official names with the aid of the scientific community which hold expert knowledge on Greenland.

MINOR CORRECTIONS
P. 1595, l. 9: Collected by whom?
This list is comprised of names from the Berthelsen list collected by the Geodetic Institute and updated by the GST and NNA – see also introduction.
P. 1595, l. 14: It is a bit confusing that you refer to non-Greenlandic glacier names as “Danish/foreign” names. Here in line 14, it makes sense to write “foreign” as most non-Danish expeditions named glaciers in their mother tongue. In contrast, it makes most sense that the title for column C in the database is “Danish” name, as the only non-Danish name in column C is Glacier de France (Kattilersorpia) and that name is not official.
We have decided to use only the term “foreign” now. There are numerous examples of foreign glacier names with the Danish suffix “Gletsjer”, which was added by the Danish Geodetic Institute.

P. 1595, l. 26-27: Why do you refer the “Berthelsen List” in past tense? The list still exists, although it has been updated.
This has been changed
P. 1595, l. 27: Provide an example of an error in the Berthelsen List.
Errors such as double entrees and misplaced coordinates - his is now expanded in the text
Database, cell C535: I guess that the glacier name should be either “Pasterzegletsjer” or “Pasterze Gletsjer”?
This is the name as it was accepted by the Place Name Committee – without a suffix
Database, cell C572: Please correct typo.
This has been corrected
Database, cell B569: Delete this cell text or move B569 to D569.
This cell has been moved
Database, cell B641: Delete this cell text or move B641 to D641.

This cell has been moved

Database, cell A651 and B651: If you should the general format, then A651 should be move to C651, and B651 should be moved to D651 or be deleted.

Tugto is now in the foreign list

Database, cell D653: Why do you include the old spelling “Illuluarsuit Gletscher” for this glacier?

This has been removed from the alternatives

Database, cell C710: Revise cell text.

Henson Gletsjer is now on the Alternative list

REFERENCES

Rastner, P., Bolch, T., Mölg, N., Machguth, H., Le Bris, R., and Paul, F.: The first complete inventory of the local glaciers and ice caps on Greenland. The Cryosphere, 6, 1483-1495, 2012.

Schmadel, L.D.: Dictionary of minor planet names. Springer-Verlag, Berlin. 1992.

Brief communication: Getting Greenland's glaciers right – a new dataset of all official Greenlandic glacier names

A. A. Bjørk[1], L. M. Kruse[2] and P.B. Michaelsen[3]

[1]Natural History Museum of Denmark, University of Copenhagen, Copenhagen, Denmark

[2]Oqaasileriffik – The Greenland Language Secretariat, Ministry of Culture, Education, Research and Church, Nuuk, Greenland.

[3]Danish Geodata Agency, Danish Ministry of the Environment, Copenhagen, Denmark

Correspondence to: A. A. Bjørk (andersb@snm.ku.dk)

Abstract

Place names in Greenland can be difficult to get right, as it is a big mix of Greenlandic, Danish, and other foreign languages. On top of that orthographies have changed through time. With this new dataset we ~~wish to~~ give the researcher working with Greenlandic glaciers the proper tool to finding the correct name for glaciers and ice caps in Greenland, as well as to locate glaciers described in the historic literature with the old Greenlandic orthography. The dataset contains information of glacier names of 733 glaciers; 285 originating from the Greenland Ice Sheet and 448 from local glaciers and ice caps.

1 Why place names matter

It goes without saying that referring to a geographical feature by the same name saves both the reader and the author a lot of trouble. However, problems may arise when there is no consensus as to which feature is referred, or when the name has changed in time. Particularly in Greenland,

history has not been kind to the researcher who wishes to get the place names right. The written Greenlandic language has undergone changes since the first expeditions and names have changed through time. Furthermore, the languages spoken on the east – and west coast of Greenland also differ causing further dissimilarities in the names. Therefore, it can be quite a challenge to apply the correct place name in Greenland. There are already databases of geographic place names available, like the USA National Geospatial-Intelligence Agency GEOnet Names Server, however this has not been updated recently and contains errors and place names in the old Greenlandic orthography. While many researchers have gone great lengths to get the glaciers names right(Higgins, 2010; Laursen, 1972; Rignot and Mouginot, 2012; Weidick, 1995), until now no complete list of official glacier names have been presented to the public.

It is with this predicament that we wish to share with the cryospheric community this dataset of official names of all Greenlandic glaciers. Furthermore, we match the glacier names dataset with the Randolph Glacier Inventory (GRI), the most complete glacier inventory available(Pfeffer et al., 2014; Rastner et al., 2012). ~~Using this dataset will avoid future misunderstandings regarding the glaciers names, as well as aid researchers in locating glaciers based on old names found in the literature.In addition, it is essential to emphasize the importance of cultural identity found within a native language. Therefore using the correct and official names, which are often of Greenlandic origin sends a positive signal to the local community of inclusion rather than exclusion~~.

2 A brief history of Greenlandic place names

The official Greenlandic authority of place names Nunat Aqqinik Aalajangiisartut (NAA) (http://www.oqaasileriffik.gl) and the Danish Geodetic Institute now called the Danish Geodata Agency (GDA) (www.gst.dk) have been well aware of the problems that may arise from differing

place names, and have initiated a formalization of all Greenlandic place names. This is no easy task with a country of Greenland's size, where humans have lived and traveled for centuries vigorously naming features in the landscape. In addition to names already enlisted in the official data base, names have also been collected from maps, historic literature and from oral accounts by the GDA and later the NNA.

Traditionally the Greenlandic place names have been more of a description of the place rather than a name in the classical form. ~~The name can often aid the traveler or scientist in understanding the particularity of the place.~~ This is also the case with many of the glacier names, however no complete translation exists (Geodatastyrelsen, 2013). Contrary, the Danish/foreign names were often given to the glaciers during expeditions and are rarely descriptive of the glacier. Instead the glacier names were often given to please funders, family, colleagues, and contemporary celebrities.

Registration of place names in Greenland became formalized in 1934 when the Greenland Place Names Committee was formed in Denmark (Kleivan, 1990). Efforts to formalize the place names were then made during the creation of a large map-series of the entire coast line. During this process a representative from the Danish Geodetic Institute would travel the coast and record all known names with assistance of locals. All sorts of features were recorded and the geographic location pinned down on the map. The place names were thus a result of the communication with the locals and the quality of the existing maps. This record along with names from previously published maps that passed the board at the Place Name Committee became part of the official list of recognized place names. This data base, known as the "*Berthelsen List*", consisted of more than 25.000 entries, and was known to contain errors and discrepancies, such as double entries and wrong coordinates.

In 1973 Greenland underwent a language reform and the orthography was changed, and in 2001 NNA implemented the new Danish way of spelling "glacier" (gletsjer). As an example, the large

marine terminating glacier "Kangerlussuaq Gletsjer" on the southeast coast of Greenland(Wager et al., 1937) has changed name from *Kangerdlugssuaq Gletscher* to *Kangerlussuaq Gletscher* to *Kangerlussuaq Gletsjer* in the process. However the pre-1973 orthography is most often used in the scientific literature(Bevan et al., 2012; Joughin et al., 2008; Khan et al., 2014).

In 1984 the responsibility of the Greenlandic place names was transferred to the Greenland Home Rule and NNA. In 1996 single authorization of place names was introduced in Greenland, allowing only one official name which is the Greenlandic where applicable. Thus, *Jakobshavn Isbræ*, Greenland's fastest outlet(Joughin et al., 2014) officially became *Sermeq Kujalleq*. ~~, and s~~Since then more than 6.000 additional names have been added. It is from this list of place names that all glacier names have been extracted. Furthermore, all glacier entries have subsequently gone through a vigorous quality control, erasing double entries and replacing misplaced data points by manually checking all entries in the dataset, and comparing their location with that of maps published by the GST. Higgins, 2010 contains a comprehensive history of Greenlandic place names~~-~~, which also includes a long list of both official and unofficial place names in northeast Greenland.

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3 A new dataset of Greenlandic glacier names

The present dataset is a compilation of all official Greenlandic ~~glaciers~~ names of ~~(~~733 glaciers~~. in total).~~ 285 glaciers are outlets or passive margins from the Greenland Ice Sheet (GrIS) and 448 are local glaciers or ice caps (LGIC). The 448 LGICs represent ~2,2% of the more than 20.000 Greenlandic LGICs represented in the RGI. However, the LGICs on this list do account for ~41% of the total area on Greenlandic LGICs in the RGI. Figure 1 provides geographic location for GrIS glacier and LGICs and an example of the information available in the database. The database contains the old Greenlandic spelling of the ~~name of the glacier~~glacier names, as well as the new Greenlandic spelling, the ~~Danish/~~foreign name if one such exists, and the now official place name.

The current official place name is the new Greenlandic name, and when no Greenlandic name exists the official name is the ~~Danish/~~foreign name, often with the Danish suffix for glacier "gletsjer". Many of the Danish glacier names are spelled including the letters, Æ(æ), Ø(ø), and Å(å).

For each glacier present in the database, information on the glacier's ID in the Randolph Glacier Inventory (RGI)(Pfeffer et al., 2014; Rastner et al., 2012) is available. The RGI ID is added as this is the presently most completed inventory of Greenlandic ice bodies. Furthermore, information regarding whether the name refers to a section or an outlet of the Greenland Ice Sheet (GrIS) or if it is a local glacier or ice cap (LGIC) is also available. Coordinates are given as Latitude/Longitude for the place name location and for the center coordinate of the glacier polygon in the RGI.

By examining the dataset, one might notice ~~their favorite~~an intensively studied and unofficially named glacier missing from the list. This can be explained by the fact that the glacier name under question has yet to be recognized as an official name, either because it has not been brought to the attention of the NNA or has been discarded by the authorities in the past. There are several examples of glaciers that have been widely studied and whose name may appear official, yet this is not the case. A prominent example is the most studied local glacier in Greenland, known as the "Mittivakkat Gletscher" (Mernild et al., 2011). The name "Mittivakkat" (formerly spelled "Midtluagkat") refers to the large nunatak on the glacier, and was mapped in 1932, by the 7th Thule-expedition led by the Danish explorer Knud Rasmussen (Rasmussen, 1933). Later the glacier ~~has been~~was given its unofficial name by researchers studying the glacier (Fristrup, 1960; Hasholt, 1976; Larsen, 1959), however the name was never authorized by the proper authorities. There are many similar examples along the coast of Greenland. Another example is the large number of glaciers the were named by Norwegians in central east Greenland in the early 1930s. None of these names made it on the official list as they were regarded politically motivated(Higgins, 2010) as Denmark and Norway were fighting over the right to east Greenland.

It should be noted that the database of official Greenlandic glacier names is not exhaustive nor finished – it is a work in progress and the NAA is continuing the process of registering new and old place names. In connection to the publication of the present dataset, we strongly urge the scientific community to send suggestions of old and already established glacier names that does not appear on the list to the corresponding author. It is recommended that these should be sent along with references in which the glacier name appears. We will then gather all these unofficial place names and submit a single application to the NNA, after which the names will be considered. Once the glaciers names are on the official list, they will appear on official maps in the future – according to map scale and purpose. This collaborative scientific effort will greatly assist and ease future work in this area of the world and clarify the nomenclature of Greenlandic place names.

4 Using this dataset

The dataset presented is ~~attached as~~ available ~~an~~ online ~~supplementary table~~in a spreadsheet, as a ArcGIS shape file and as a KML layer. The dataset can be accessed at *Figshare* where it will be updated and stored under a Creative Commons (CC0) license.

Comment [AAB1]: (Authors will provide a permanent link and DOI with the once paper is accepted)

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To avoid further confusion regarding the use of the correct name, we suggest that the official glacier name is used whenever referring to a Greenlandic glacier. However, as many glaciers have been studied in the past and literature refers only to the Danish / non-Greenlandic name, we suggest that both names are mentioned ~~in the text~~ in cases where a glacier's unofficial foreign name has become widely accepted within the scientific community ~~with multiple names appears~~. When using this dataset please refer to this publication.

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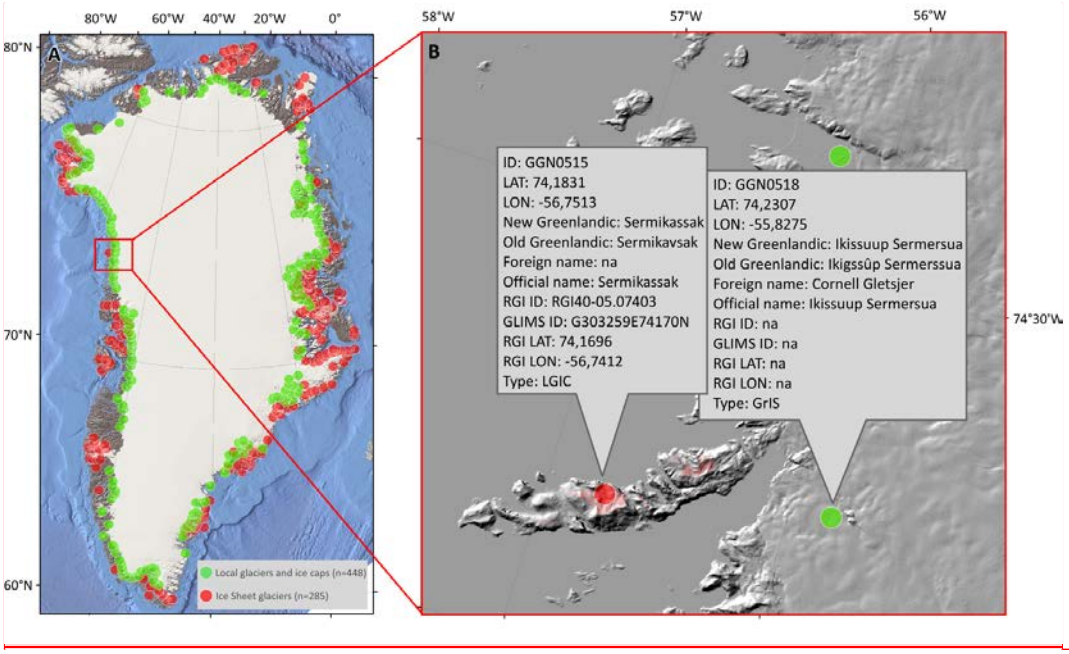
~~Table1. Extraction from the glacier name database. All glaciers are represented with coordinates, and four possible names – the "New Greenlandic" is the official name, and if no such name exists the official name is the "Danish / Foreign". Furthermore, not shown in this table is additional information related to the glacier's location within a certain township, additional coordinates presented in UTM24, and a unique database ID.~~

Latitude	Longitude	New Greenlandic	Old Greenlandic	Danish / Foreign	Alternative suggestion
70,5454	-50,4897	Sermeq Avannarleq	Sermeq Avangnardleq	Lille Gletsjer	-
77,4220	-72,5149	Upernavissuup Sermia	Upernavigssûp Sermia	Kissel Gletsjer	Upernavigguup Hermia
61,0080	-45,9067	-	-	Narsaq Bræ	-
64,2966	-49,6102	Kangiata Nunaata Sermia	Kangiata Nunâta Sermia	-	-
71,4193	-51,9240	Nunaarsussuup Kangiatungaani Sermikassak	-	-	-
69,1833	-49,8001	Sermeq Kujalleq	Sermeq Kujatdleq	Jakobshavn Isbræ	-

Comment [AAB3]: Table1 has been deleted and replaced by figure1b



Comment [AAB4]: Figure 1 has been replaced

Figure 1. Maps of Greenland with all official glacier names plotted~~.~~. Local glaciers and ice caps (LGIC) are in red, glaciers from the Greenland Ice Sheet (GrIS) are in green. A) The spatial ditribution of~~in red (733 glaciers in total). C~~ glacier names concentrations are high in the populated areas and in areas that have been extensively explored – however, there are still fairly large stretches of coastline with no named glaciers (eg. the southeast and north coasts) Background image: IBCAO ver3.0 (Jakobsson et al., 2012). B) A zoom in on the Mellville Bay in northwest Greenland with examples of the contents of the database. Background images is a GIMP hillshade(Howat et al., 2014).