

README for Historical Southern Ocean Icebergs

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This document provides a description of the dataset created for the *Journal of Glaciology* paper “*Historical Occurrence of Antarctic Icebergs within Mercantile Shipping Routes and the Exceptional Events of the 1890s*” (JOG-22-0139) by Robert Headland, Nick Hughes and Jeremy Wilkinson (doi: TBD). We have endeavoured to make the data as accessible as possible by providing it in a range of formats.

Dataset Files

The dataset consists of the following files:

Historical Southern Ocean Icebergs 1.1.xlsx

This is an Excel spreadsheet consists of the following columns of data:

type	The type of observation, either an iceberg , non-existent [island], or [historical] event .
date	The date of the observation in ISO-format, i.e. YYYY-MM-DD .
datestr	The month and day of the month of the observation, as precise as it is known. The day is numeric and month is in roman numerals.
uncertainty	An estimate of the temporal precision of the observation, in days.
ship	The name of the vessel making the observation.
captain	The name of the captain of the vessel, if known.
latstr	Text string for the latitude(s) of the observation. The latitudes are in decimal degrees format, with hemisphere, i.e. DD-DD°S. If the value is given in parentheses it implies there is an uncertainty in the position. Two latitudes separated by a hyphen indicate observations across a range of latitudes along the vessel track.
lat1	The numerical value of the latitude.
lat2	The numerical value of the second latitude, if this is an along track observation.
lonstr	Text string for the longitude(s) of the observation. The longitudes are in decimal degrees format, with hemisphere, i.e. DD-DD°W. If the value is given in parentheses it implies there is an uncertainty in the position. Two longitudes separated by a hyphen indicate observations across a range of latitudes along the vessel track.
lon1	The numerical value of the latitude.
lon2	The numerical value of the second longitude, if this is an along track observation.
precise	Flag TRUE or FALSE to indicate if there is any uncertainty in the position.
source	Source(s) for the observations. These are listed in the bibliography below. Where several sources have been found, these are separated by semicolons.
observation	Text description of the observation. NB: To help with conversion to CSV-format, commas have been converted to semi-colons.

Historical Southern Ocean
Icebergs 1.1.csv

This is the plain text, machine-readable, version of the spreadsheet and has the same columns of data as above.

SO_Iceberg_Points_1.1.shp
SO_Iceberg_Points_1.1.shx
SO_Iceberg_Points_1.1.dbf
SO_Iceberg_Points_1.1.prj

The data in ESRI Shapefile format for the observations that consist of single points.

The points are in longitude, latitude (EPSG:4326) map projection.

The attribute columns are the same as described above, and include:

type	The type of observation, either an iceberg , non-existent [island], or [historical] event .
date	The date of the observation in ISO-format, i.e. YYYY-MM-DD .
datestr	The month and day of the month of the observation, as precise as it is known. The day is numeric and month is in roman numerals.
uncert	An estimate of the temporal precision of the observation, in days.
ship	The name of the vessel making the observation.
captain	The name of the captain of the vessel, if known.
latitude	<p>Text string for the latitude(s) of the observation. The latitudes are in decimal degrees format, with hemisphere, i.e. DD-DD°S.</p> <p>If the value is given in parentheses it implies there is an uncertainty in the position.</p> <p>Two latitudes separated by a hyphen indicate observations across a range of latitudes along the vessel track.</p>
longitude	<p>Text string for the longitude(s) of the observation. The longitudes are in decimal degrees format, with hemisphere, i.e. DD-DD°W.</p> <p>If the value is given in parentheses it implies there is an uncertainty in the position.</p> <p>Two longitudes separated by a hyphen indicate observations across a range of longitudes along the vessel track.</p>
precise	Flag TRUE or FALSE to indicate if there is any uncertainty in the position.
source	Source(s) for the observations. These are listed in the bibliography below. Where several sources have been found, these are separated by semicolons.
obstext	Text description of the observation. NB: To help with conversion to CSV-format, commas have been converted to semi-colons.

SO_Iceberg_Lines_1.1.shp
SO_Iceberg_Lines_1.1.shx
SO_Iceberg_Lines_1.1.dbf
SO_Iceberg_Lines_1.1.prj

The data in ESRI Shapefile format for the observations that are along track. A linear interpolation has been applied between the start and end locations to provide intermediate locations to help with reprojection to other map projections.

The lines are in longitude, latitude (EPSG:4326) map projection.

The attribute columns are the same as described for the points file above.

Bibliography

The dataset includes reports from a number of additional sources, not all of which are cited in the paper. The full references for these are listed here:

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