Title of Paper

Name of Authors (if at more than one address, please number)

1Department Name, Institution, City, State or Province, Postal Code, COUNTRY

2Department Name, Institution, City, State or Province, Postal Code, COUNTRY

\*Corresponding author’s email address:

(We acknowledge the work of Annette Semadeni-Davies (Sweden), who designed this template for the 15th NRB Symposium and Workshop. The template have been modified for this symposium. )

# Abstract

These instructions have been prepared in the format that should be used for the final papers submitted to the 22nd International Northern Research Basins Symposium and Workshop, Yellowknife, Canada, August 18-24, 2019. **Papers should not exceed ten (10) Letter pages (8.5″ x 11″) including text, figures, tables, and references.** An abstract of no more than 250 words should be supplied and 3–6 keywords are mandatory. The main text should be subdivided into logical sections: e.g., abstract, keywords, introduction, methods, results and discussion, conclusions, and references. Format using 2.5 cm margins, 12pt Times Roman typeface and single line spacing. Include a running heading at the top of each page, 1.25 cm from the top edge of the paper, with the conference title, place and date centered. Include a running footer at the bottom of each page, 1.25 cm from the bottom edge of the paper, with page numbers.

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# Keywords

Arctic environments; Northern research basins; conference paper; electronic files; hydrology

# Introduction

This Word document uses styles to set the formatting. Styles defined in the document are listed under the Home tab. The styles define font, text size, paragraph justification, numbering, bullets, margins, tabulation, and line spacing. Please ensure that you select the correct style for headings, lists, text paragraphs, etc. Please do not modify the styles.

To simplify the formatting of your paper, use the structure of this document as a template. Simply replace the words in the headings and text of these instructions with the contents of your paper.

# Structure and content

The following is a guideline for the structure of each paper,using this document’s styles and formatting. Papers should include:

1. Title, author name(s), full postal and email addresses for each author.
2. Abstract: no more than 250 words briefly specifying the aims of the work, the main results obtained, and the conclusions drawn.
3. Keywords: 3–6 keywords which will enable a subsequent information retrieval system to locate the paper.
4. Main text should be subdivided as follows:

Introduction – describing the background of the work and its aims.

Methods – a brief description of the methods/techniques used.

Results and Discussion – a clear presentation of the results obtained, highlighting any trends or points of interest.

Conclusions – a brief explanation of the significance and implications of the work reported.

Acknowledgment – a brief acknowledgment of funding bodies or individuals who contributed but are not among the authors

1. The title of the individual headings may vary depending on the nature of the paper, but it is important that a clear structure is preserved. **Full papers should not exceed ten (10) Letter (8.5″ x 11″) pages including text, figures, tables, and references.**

# Headings and layout

Major headings like the one above are typed bold in 12pt uppercase Arial typeface (capital letters), with 18 pts above and none below. The Heading 1 style is predefined with numbering and line spacing. Headings for the abstract, keywords, acknowledgments, and references should not be numbered.

## Minor Headings

Minor headings like the one above (style Heading 2) are in 12pt bold Arial typeface, with 12 pts above and none below. Numbering and line spacing are automatic.

### Headings under minor headings

Sub-headings like the one above (style Heading 3) are in 12pt bold Arial typeface, with 6 pts above and none below. Numbering and line spacing are automatic.

## Page Layout

All text should be word-processed using the Letter page size, respecting the following general layout requirements:

Papers must be formatted using 2.5 cm margins.

Include a running Header at the top of each page, 1.25 cm from the paper edge, with the following text centered in 10pt Arial typeface and underlined (already in place with this document):

 22nd International Northern Research Basins Symposium and Workshop

Yellowknife, Canada – August 18-24, 2019

Include page numbers as a Footer using Arabic numerals in 10pt Arial typeface. Footers have a single line above, separating the page numbers from the main text (already in place with this document).

There is no space between headings and the paragraph directly below. Subsequent paragraphs (Normal) will follow automatically and have 6pt spaces before and after. Both paragraph styles are justified and are not indented. Please avoid using footnotes or splitting tables over two (or more) pages. Please use a 12pt Times Roman typeface for text.

## The First Page

The following is an example of a bulleted list showing the special formatting requirements for the first page:

* The title of the paper (style Title) should appear centered in 16pt Arial typeface as shown on the first page of this document. There are 12 pts before and after the title.
* The author name(s) should appear centered in regular 12pt Arial typeface, separated by commas. The style (Authors) has 12 pts above and below. Indicate the corresponding author with an asterisk (\*). Authors should have affiliation indicated with a number (superscript) referring to the addresses directly below.
* The author affiliation(s) and full postal address(es) should be centered in 10pt italics Arial typeface following the example on page one of these notes. There are no spaces before or below the affiliations.
* Show the corresponding author’s email address in 8pt Arial italics below the affiliation(s). The email address should be preceded by an asterisk. There are no spaces before or below the email address.
* An abstract of up to 250 words follows. The abstract should explain the purpose of your study in a clear manner, elucidate the content somewhat, and finish by stating the key findings from your study.
* Keywords follow the abstract—3 to 6 of them—before the main text begins.

## Figures and Tables

Figures and tables should be numbered consecutively as they are presented (Figure 1, Figure 2, etc., and Table 1, Table 2, etc.). A descriptive caption, including the table or figure number, should be placed directly above tables and below figures. Figures and tables should be referred to in the text and should be positioned close to where they are first cited. Please do not place figures and tables at the end of the paper. Please use the Caption style already formatted; captions are preceded and followed by a 6 pt space. Please leave a paragraph space between the base of a table and the next text paragraph. If necessary, please position a table at the top of the next page if otherwise it would be divided. Large tables can be rotated to fit on the page with landscape orientation.

Keep figures as simple as possible for clarity: avoid unnecessary complexity, color, and excessive details. Illustrations should be clear and text in illustrations should not be written with less than 10pt font size. Please do not insert spreadsheet graphics as embedded objects, as this will lead to very large files: instead copy and paste the picture via the clipboard as an enhanced metafile.

Figure resolution should be equal to or greater than 150 dpi (dots per inch).

## Mathematics, Nomenclature and Units

All mathematics included in the text should be typed using an appropriate equation editor. Please take care that all terminology and notation used will be widely understood. Abbreviations and acronyms should be spelled out in full at their first occurrence in the text.

SI units are strongly recommended. If non-SI units are necessary, SI equivalents (or conversion factors) must also be given. Units should have a single space between the number and the unit. The decimal separator is a full stop (e.g., g=9.81 m/s2).

## Citations in the Text

* Citations should be given in the text in the form “as mentioned by Hoover (2002)” or “as stated elsewhere (Kerr & Chung 2001).”
* If the paper has more than two authors, the names of all the authors should be given in the reference list; citations should appear as follows: Metcalf et al. (2002).
* Two or more years in parentheses following an author's name are cited in ascending order of year, and two or more references published in the same year by the same author are differentiated by letters a, b, c, etc. For example: Brown (1969, 1972, 1973a, b).
* Different references cited together should be in date order and separated by semicolons, for example: (Smith 1959; Thomson & Jones 1982; Green 1990).
* If a paper has been accepted for publication but has not been published, “(in press)” should be used instead of a date.
* If a paper has been submitted but not definitely accepted the term “(submitted)” should be used. If the paper is still being prepared, “(in preparation)” should be used.

# Language

Papers should be in good, grammatically correct English. Either US or UK English spelling is acceptable, but please be consistent in your choice. If English is not your native language you should seek the help of a colleague or professional translator.

# Submission of papers

Papers must be provided in electronic form. While PDF is acceptable, MS WORD format is preferred. Submit your paper through 22ndNRB.com

We thank you for your efforts to follow these Instructions to Authors and look forward to receiving your paper by June 24, 2019.

# A NOTE ABOUT References

It is essential that papers include a list of references at the end, showing that the author is aware of earlier work in the area both nationally and internationally. The references style is based on the requirements of *Hydrology Research*, which can be found at
<http://www.iwaponline.com/nh/i2a.htm>

## List of References

All references cited in the text are to be listed in alphabetic order at the end of the paper. The References style is formatted using 12pt typeface with the first line hanging by 1 cm.

### Journal reference style

Sun, H., Cornish, P. & Daniell, T.M. 2003 Digital elevation hydrological modelling in a small catchment in South Australia. *Nord. Hydrol.* 34(3), 161–178.

### Conference proceeding reference style

Bengtsson, L., Semadeni-Davies, A., & Westerström, G. 1997 Winter related hydrological studies in Sweden. Proc. *11th Northern Research Basins Symp. Vol 2., Prudhoe Bay – Fairbanks, Alaska, Aug. 18–22,* pp. 3–14.

### Reports on Internet

Please cite the date that you last looked at the site.

Semadeni-Davies, A.F. 2003 Observation and modelling of urban snowmelt. *Stormwater Management in Cold Climates: Planning, Design and Implementation*. Portland, Maine, November 3–5. Available online: http://www.cascobay.usm.maine.edu/proceed.html, 9 February 2005.

### Book reference styles

#### Book

Saucier, W.J. 1983 *Principles of Meteorological Analysis.* Dover, New York.

#### Chapter within a book

Businger, J.A. 1973 Turbulent transfer in the atmospheric surface layer. In: Haugen, D.A. (ed.), *Workshop on Micrometeorology.* American Meteorological Society, Boston, MA, pp 67–100.

#### Report

Bruland, O. & Maréchal, D. 1999 *Energy- and Water Balance of the Active Layer, 1991–1994. Understanding Land Arctic Physical Processes 1996-1998.* Technical Report STF22A98417. SINTEF Civil and Environmental Engineering, Trondheim, Norway.

#### Thesis

Semadeni-Davies, A. 1999 *Urban Snowmelt Processes: Modelling and Observation*. Doctoral Thesis, LUTVDG/(TVVR-1026)/(1999), Department of Water Resources Engineering, Lund University, Sweden, unpublished.