

# Annals of Glaciology authors' guide to the IGS L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> class file

Craig BAXTER,<sup>1</sup> Rachel BROWN,<sup>2\*</sup> Louise BUCKINGHAM,<sup>3</sup>

Magnús M. MAGNÚSSON<sup>1</sup>

<sup>1</sup>*International Glaciological Society, Scott Polar Research Institute, Cambridge, UK*

<sup>2</sup>*Climate Change Institute, University of Maine, 303 Bryand Global Sciences Center, Orono, ME, USA*

<sup>3</sup>*Institute of Geological and Nuclear Sciences Ltd, Lower Hutt, New Zealand*

*Correspondence: Craig Baxter <craig@igsoc.org>*

**ABSTRACT.** The design for the *Annals of Glaciology* has been implemented as a L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> class file and is derived from article.cls. We recommend that authors use this guide as a template. Import your text to below the \maketitle command and then cut-and-paste the title/author/affiliation/abstract details. While writing we suggest you use the two-column [twocolumn] option to check that mathematical equations fit the measure. Submitted papers must, however, be presented using the one-column [review] option. The *Annals of Glaciology* is printed in Optima. However, submissions using Computer Modern are fine. If you have any problems using the class file, please email Craig Baxter at the above address, attaching your tex, log, cls, sty, bib, bbl, bst and any additional sty files you are using. The abstract should be less than 200 words and one paragraph long.

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\*Present address: Centre for Glaciology, Institute of Geography and Earth Sciences, University of Wales, Aberystwyth, UK.

## USING THE IGS CLASS FILE

Please ensure you have downloaded the latest version from <http://igsoc.org/production/>. The IGS L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> annals guide has examples of most environments authors are likely to come across. The title page contains some new environments, e.g. affiliation and abstract. Papers should be divided into unnumbered sections with short section headings. SI units and internationally recognized systems of abbreviation should be used throughout. The T<sub>E</sub>X file should be named to reflect your paper number, i.e. 72A712.tex. Please remove any extraneous text (e.g. text from previous drafts, notes and comments that will not form part of the final printed text of the paper).

### Additional packages supplied with igs.cls

The distribution package contains the following files; the first 10 are IGS-specific, the other 10 are standard L<sup>A</sup>T<sub>E</sub>X distribution files:

`igs2eannalsguide.tex` IGS L<sup>A</sup>T<sub>E</sub>X guide

`igs2eannalsguide.pdf` pdf file of this guide

`igs2eannalsguide[twocolumn].pdf` pdf file of this guide using the `[twocolumn]` option

`72A712Fig01.eps` Fig. 1 in this guide

`72A712Fig02.eps` Fig. 2 in this guide

`igs.cls` IGS class file

`igs.bst` IGS bibliography style file

`igsnatbib.sty` IGS style file for citations

`igsupmath.sty` IGS style file for upright Greek characters

`igsrefs.bib` sample B<sub>I</sub>B<sub>T</sub><sub>E</sub>X database

`amsbsy.sty` style file called in by `igsupmath.sty`

`amsfonts.sty` style file called in by `amssymb.sty`

`amsgen.sty` style file called in by `igsupmath.sty`

`amssymb.sty` accesses AMS fonts `msam` and `msbm`

`ednmath0.sty` style file required for `[review]` option

`edtable.sty` style file required for `[review]` option

`graphicx.sty` graphics style file

`lineno.sty` style file required for `[review]` option

51 `ltabptch.sty` style file required for [review] option

52 `vplref.sty` style file required for [review] option

## 53 Typesetting the title page

54 In the IGS design, shortened versions of the title and authors are used in the running head. The shortened  
55 version is specified in square braces immediately after the `\title` and `\author` commands (see below). The  
56 order in which the following elements appear may be crucial, i.e. `\maketitle` must be the last command  
57 before your paper commences. The *Annals of Glaciology* is printed on A4 paper which is slightly longer  
58 than US letter size. The default here is A4 paper but there is also a `[letterpaper]` option. Be aware that  
59 using `[letterpaper]` will fractionally lengthen your article. This guide was typeset using the following  
60 code:

```
61
62 % check that the math fits the two-column format:
63 % \documentclass[annals,twocolumn]{igs}
64
65 % but use this version when submitting your article:
66 \documentclass[annals,review,oneside]{igs}
67
68 % other options are available
69 % authors printing on US letter size are advised
70 % to use the slightly shorter [letterpaper] option
71 % SINGLE COLUMN
72 % \documentclass[annals]{igs}
73 % SINGLE COLUMN, FEWER LINES/PAGE
74 % \documentclass[annals,letterpaper]{igs}
75 % DOUBLE COLUMN, FEWER LINES/PAGE
76 % \documentclass[annals,twocolumn,letterpaper]{igs}
77
78 \usepackage{igsnatbib}
79
80 % check if we are compiling under latex or pdflatex
```

```

81  \ifx\pdftexversion\undefined
82    \usepackage[dvips]{graphicx}
83  \else
84    \usepackage[pdftex]{graphicx}
85    \usepackage{epstopdf}
86    \epstopdfsetup{suffix=}
87  \fi
88
89  % the default is for unnumbered section heads
90  % if you really must have numbered sections, remove
91  % the % from the beginning of the following command
92  % and insert the level of sections you wish to be
93  % numbered (up to 4):
94
95  % \setcounter{secnumdepth}{2}
96
97  \begin{document}
98
99  \title[IGS LATEX guide]{Annals of Glaciology
100    authors' guide to the IGS~\LaTeXe~class~file}
101
102  \author[Baxter and others]{Craig BAXTER,$^1$
103    Rachel BROWN,$^2$~\protect\thanks{Present address:
104    Centre for Glaciology, Institute of Geography and
105    Earth Sciences, University of Wales, Aberystwyth,
106    UK.}~\ Louise BUCKINGHAM,$^3$
107    Magn\us~M.~MAGN\us~USSON$^1$}
108
109  \affiliation{%
110    $^1$International Glaciological Society, Scott

```

```

111   Polar Research Institute, Cambridge, UK\\
112   $^2$Climate Change Institute, University of Maine,
113   303 Bryand Global Sciences Center, Orono,
114   ME, USA\\
115   $^3$Institute of Geological and Nuclear Sciences
116   Ltd, Lower Hutt, New Zealand\\
117   Correspondence: Craig Baxter
118   $<$craig@igsoc.org$>$}

```

```

119
120 \abstract{The design for the \emph{Annals of...
121 The abstract should be less than 200 words and
122 one paragraph long.}

```

```

123
124 \maketitle
125
126 \section{Using the IGS class file}

```

```

127

```

## 128 Lists

129 The IGS class file provides for numbered (`enumerate`) and unnumbered (`itemize`) lists. Nested lists are  
 130 not encouraged. The default numbering system is 1., 2., 3., etc.; please do not change this unless there is  
 131 a good reason. The IGS design removes bullet points from unnumbered lists.

## 132 User-defined macros

133 If possible, please do not define any new macros.

## 134 Tables

135 Tables may be typeset in either one- or two-column format. To typeset two-column format, add asterisks  
 136 (`\begin{table*}... \end{table*}`) as shown in Table 2. We may change the format in-house if necessary.  
 137 Please avoid the use of colour or shading. Note that if you choose to refer to tables using labels, `\caption`  
 138 must precede `\label`, as in standard L<sup>A</sup>T<sub>E</sub>X. Vertical rules are not house-style and will be removed. Note  
 139 the use of the `minipage` environment in Table 1 which enables table footnotes to be output. If the table

**Table 1.** One-column table captions will extend beyond the rules in two-column format. Do not try to adjust! Table captions do not have full points at the end

---

Period*	Surface elevation change	Emergence velocity
1975–85	−0.50	0.43
1986–2002	−1.03	0.32
Difference	−0.53	−0.11

---

\*Please do not use more than one ‘&’ between columns, and note that if a table includes table footnotes, it must be inside a `minipage` environment.

---

```

\begin{table}% table1, one column
\caption{One-column table captions will extend beyond
the rules in two-column format. Do not try to adjust!
Table captions do not have full points at the end}
\label{period}
\begin{minipage}{86mm}% you only need this line if you
% have a table footnote
\begin{tabular}{@{}lcc}\hline
Period\footnote{Please do not use more than one ‘\&’
between columns, and note that if a table includes
table footnotes, it must be inside a \texttt{minipage}
environment.}%
& Surface elevation change
& Emergence velocity\\ \hline
1975--85 & $-0.50$ & 0.43\\
1986--2002 & $-1.03$ & 0.32\\
Difference & $-0.53$ & \llap{$-$}0.11
\end{tabular}
\end{minipage}% you only need this line if you have a
% table footnote
\end{table}

```

---

140 is two-column, use `{178mm}` instead of `{86mm}` on line 6. The source code for Tables 1 and 2 is shown  
141 immediately below the tables.

## 142 Figures

143 Figures may be typeset in either one- or two-column format. One-column format allows up to 86 mm (e.g.  
144 Fig. 1); two-column format up to 178 mm (e.g. Fig. 2). Please do not provide original graphics files in  
145 which the figure is a great deal larger or smaller than what you envisage will be the final printed size. To  
146 typeset two-column format, add asterisks (`\begin{figure*}...\end{figure*}`) as shown in Fig. 2. We  
147 may change the format in-house if necessary. Please note that if you choose to refer to figures using labels,  
148 `\caption` must precede `\label`, as in standard L<sup>A</sup>T<sub>E</sub>X.

149 Please send one file for each figure (in other words do not use subfigures) and use a name that clearly  
150 identifies it (e.g. ‘72A712Fig03.eps’).

151 In addition, figures should be eps, ai (illustrator), ps, tif, psd or pdf. Use strong black lines with a width  
152 of at least 0.75pt at final printed size (avoid tinting if possible) and SI units in labels. Lettering should  
153 ideally be Optima to match the final typeface; Arial or a similar sans serif font for a second choice. Aim to  
154 have the final-size lettering at 9pt, if possible. Figures should not be in boxes. The source code for Figs 1  
155 and 2 is shown immediately below the figures.

## 156 Equations

157 We are including some complex equations as examples. Equations should be checked for width using the  
158 `[twocolumn]` option. Note the use of arrays in the following equation:

$$\alpha_{t_2} = \begin{cases} \alpha_{t_1} - a_1[\ln(T+1)]e^{(a_2\sqrt{n})} & n_d > 0 \quad \text{and} \quad T > 0 \\ \alpha_{t_1} - a_3e^{(a_2\sqrt{n})} & n_d > 0 \quad \text{and} \quad T < 0 \\ \alpha_{t_1} + a_4P_s & n_d = 0 \end{cases} \quad (1)$$

159 Equation (1) above used the following code:

160

161 `\begin{equation}`

162 `\label{arrayexample}`

163 `\alpha_{t_2}= \left\{\%`

164 `\begin{array}{ll}`

165 `\alpha_{t_1} - a_1 [\ln (T+1)]`

**Table 2.** Two-column table. Seasonal and annual SAT trends (°C decade<sup>-1</sup>) in the Arctic

Area	1951–2005					1976–2005				
	Dec–Feb	Mar–May	Jun–Aug	Sep–Nov	Annual	Dec–Feb	Mar–May	Jun–Aug	Sep–Nov	Annual
Atlantic region	0.09	0.29	0.10	0.09	0.15	0.470	0.60	0.45	0.53	0.59
Siberian region	0.12	0.29	0.04	0.17	0.16	0.08	0.69	0.29	0.59	0.48
Pacific region	0.45	0.46	0.25	0.26	0.35	0.712	1.08	0.27	0.66	0.52
Canadian region	0.16	0.12	0.14	0.30	0.18	0.20	0.52	0.48	0.94	0.53
Baffin Bay region	−0.02	0.10	0.00	0.15	0.02	0.33	0.62	0.51	0.80	0.57
Arctic 1	0.16	0.21	0.12	0.20	0.18	0.36	200.65	0.42	0.74	0.54
Arctic 2	0.22	0.29	0.14	0.14	0.19	0.38	0.60	0.40	0.51	0.45
Arctic 3	0.28	0.31	0.14	0.13	0.21	0.42	40.53	0.41	0.42	0.43
NH (land + ocean)	0.13	0.13	0.10	0.10	0.12	0.27	0.24	0.25	0.25	0.25

```
\begin{table*}% table2, two column
```

```
\caption{Two-column table. Seasonal and annual SAT trends ( $^{\circ}\text{C}\backslash\text{decade}^{-1}$ ) in the Arctic}
```

```
\label{seasonal}
```

```
% the following illustrates how to align columns on decimal points
```

```
% since all numbers are the same width in LaTeX, redefine a ? to take up the width of a number
```

```
% do not use if your table contains a genuine ?
```

```
\catcode'\?=\active \gdef?\setbox0=\hbox{0}\hbox to\wd0{}}%
```

```
\setlength\tabcolsep{2.5pt}% column separation reduced from the default 6pt so the table fits the measure
```

```
\begin{tabular}{@{}l@{\hspace{20pt}}cccc@{\hspace{20pt}}cccc}\hline
```

```
Area & \multicolumn{5}{c}{1951--2005} & \multicolumn{5}{c}{1976--2005}\hspace{5pt}
```

```
& Dec--Feb & Mar--May & Jun--Aug & Sep--Nov & Annual
```

```
& Dec--Feb & Mar--May & Jun--Aug & Sep--Nov & Annual\hspace{5pt}\hline
```

```
Atlantic region & 0.09 & 0.29 & 0.10 & 0.09 & 0.15 & 0.470 & ?0.60 & 0.45 & 0.53 & 0.59\hspace{5pt}
```

```
Siberian region & 0.12 & 0.29 & 0.04 & 0.17 & 0.16 & 0.08? & ?0.69 & 0.29 & 0.59 & 0.48\hspace{5pt}
```

```
Pacific region & 0.45 & 0.46 & 0.25 & 0.26 & 0.35 & 0.712 & ?1.08 & 0.27 & 0.66 & 0.52\hspace{5pt}
```

```
Canadian region & 0.16 & 0.12 & 0.14 & 0.30 & 0.18 & 0.20? & ?0.52 & 0.48 & 0.94 & 0.53\hspace{5pt}
```

```
Baffin Bay region & \llap{$-}$0.02 & 0.10 & 0.00 & 0.15 & 0.02 & 0.33? & ?0.62 & 0.51 & 0.80 & 0.57\hspace{5pt}
```

```
Arctic 1 & 0.16 & 0.21 & 0.12 & 0.20 & 0.18 & 0.36? & 200.65 & 0.42 & 0.74 & 0.54\hspace{5pt}
```

```
Arctic 2 & 0.22 & 0.29 & 0.14 & 0.14 & 0.19 & 0.38? & ?0.60 & 0.40 & 0.51 & 0.45\hspace{5pt}
```

```
Arctic 3 & 0.28 & 0.31 & 0.14 & 0.13 & 0.21 & 0.42? & ?40.53 & 0.41 & 0.42 & 0.43\hspace{5pt}
```

```
NH ( $\mathrm{land}$ 
```

```
+  $\mathrm{ocean}$ ) & 0.13 & 0.13 & 0.10 & 0.10 & 0.12 & 0.27? & ?0.24 & 0.25 & 0.25 & 0.25\hspace{5pt}
```

```
\hline
```

```
\end{tabular}
```

```
\end{table*}
```



```

166      \mathrm{e}^{\{a_2\sqrt{n}\}}
167      & \mbox{$n_\mathrm{d} > 0\enskip$ and
168      $\enskip T > 0$}\\
169      \alpha_{t_1} - a_3 \mathrm{e}^{\{a_2\sqrt{n}\}}
170      & \mbox{$n_\mathrm{d} > 0\enskip$ and
171      $\enskip T < 0$}\\
172      \alpha_{t_1} + a_4 P_\mathrm{s}
173      & \mbox{$n_\mathrm{d} = 0$}
174  \end{array}
175  \right.
176  \end{equation}
177

```

Equations should be aligned on the equals signs where possible. Equations that extend beyond the one-column measure should be turned over before an operator. Note the `\skew4` command below which moves the bar over the  $R$  to the right. The value generally varies between `\skew1` and `\skew5`.

$$\begin{aligned}
 l_c = l_0 \left( \frac{\bar{R}_m}{R} \right)^2 \psi_{\frac{P}{P_0 \cos Z}} \\
 \times [\cos \beta \cos Z + \sin \beta \sin Z \cos(\psi_{\text{sun}} - \psi_{\text{slope}})]
 \end{aligned} \tag{2}$$

```

178 Equation (2) above used the following code:
179
180 \begin{eqnarray}
181 \label{eqnarrayexample}
182 l_c &= l_0 \left( \frac{\skew4\bar{R}_m}{R} \right)^2
183 \psi^{\frac{P}{P_0 \cos Z}} \nonumber \\
184 &\& \mbox{} \times [\cos \beta, \cos Z
185 + \sin \beta, \sin Z, \cos(\psi_\mathrm{sun}
186 - \psi_\mathrm{slope})]
187 \end{eqnarray}
188

```

## 189 Typesetting upright Greek characters

190 The `igsupmath` package provides macros for upright lower-case Greek (`\ualpha`–`\uxi`), and for bold lower-  
 191 case Greek (`\ubalpha`–`\ubxi`). The bold upright symbol `\eta` has to be treated differently, in this case use  
 192 `\uboldeta`.

193 To use the `igsupmath` package, you need to have the AMS `eurm/b` fonts installed.

194 The AMS packages are supplied from the AMS L<sup>A</sup>T<sub>E</sub>X distribution. If you already have the AMS L<sup>A</sup>T<sub>E</sub>X  
 195 distribution installed, you can safely delete the `ams*.sty` files (it is worth checking if the supplied files are  
 196 newer). If you do not have them already, the latest AMS Fonts/AMS L<sup>A</sup>T<sub>E</sub>X distributions can be found at  
 197 <http://ctan.org/>.

198 For upright characters add a `u`, and for upright bold characters, `ub`, e.g.

$\alpha$	<code>\ualpha</code>	$\alpha$	<code>\ubalpha</code>
$\beta$	<code>\ubeta</code>	$\beta$	<code>\ubbeta</code>
$\gamma$	<code>\ugamma</code>	$\gamma$	<code>\ubgamma</code>
$\delta$	<code>\udelta</code>	$\delta$	<code>\ubdelta</code>

200 Authors who do not have this font are requested to key their articles using the commands above. The  
 201 characters will be substituted automatically by the typesetter.

## 202 Typesetting the partial symbol

203 The `igsupmath` package also provides `\upartial` and `\ubpartial`.

204 Provided you have the AMS fonts, you can use the style file `igsupmath.sty` to typeset the partial symbol,  
 205 e.g.

$\partial$	<code>\upartial</code>	$\partial$	<code>\ubpartial</code>
------------	------------------------	------------	-------------------------

## 207 Marginal notes

208 The IGS class file redefines the L<sup>A</sup>T<sub>E</sub>X command `\marginpar`. If you wish to add a marginal note such as *Editor!*  
 209 the one alongside this text, you would key `\marginpar{Editor! Help!}`. Marginal notes will be removed *Help!*  
 210 before printing.

## 211 References

212 All citations in text should include the author name(s) and the year of publication (e.g. ‘Smith, 2014’;  
 213 ‘Smith and Jones, 2014’; ‘Smith and others, 2015’) and have an entry in the reference list.

214 References should:

215 be short;

216 be complete and accurate;

217 be arranged in alphabetical order by first author's surname;

218 include too much rather than too little information;

219 include doi numbers where available (note that older bib databases often included doi's in the page field  
220 – in which case they may appear after a comma and without braces);

221 include works accepted but not published as 'in press';

222 not include personal communications, unpublished data or manuscript in preparation or submitted for  
223 publication, data published on the web (these should be included in the text).

## 224 *Automatic references using BIB<sub>T</sub>E<sub>X</sub>*

225 To generate automatic references from a bib database, you must first specify the database (we are using  
226 `igsrefs.bib`) and then the IGS bibliography style by placing the following two commands where you  
227 would like the references to appear (normally at the end of your paper, before `\end{document}`):

228

229 `\bibliography{igsrefs}`

230 `\bibliographystyle{igs}`

231

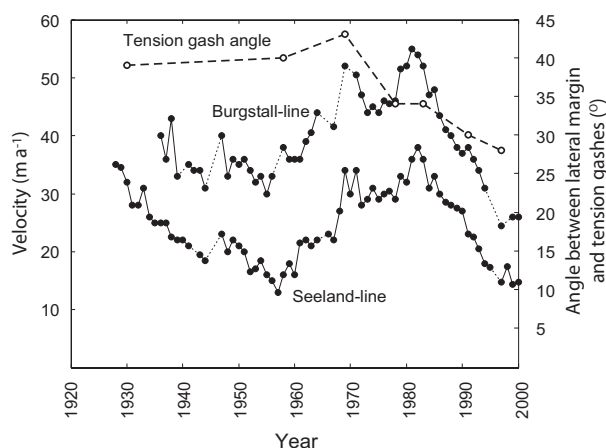
232 Then run through the following steps:

233 1. Run your paper through L<sup>A</sup>T<sub>E</sub>X.

234 2. Run BIB<sub>T</sub>E<sub>X</sub> on your paper.

235 3. Open the newly-created bbl file containing the cited references and copy the entire contents to just  
236 below the `bibliography/bibliographystyle` commands.

237 4. Then comment them out:



**Fig. 1.** One-column figures should be  $\leq 86$  mm. Good artwork can make or break a paper. Capitalize the first word of a label and use round not square brackets for units.

---

```

\begin{figure}%fig1, one column
\centering{\includegraphics{72A712Fig01.eps}}
\caption{One-column figures should be  $\leq 86$  mm.
Good artwork can make or break a paper. Capitalize
the first word of a label and use round not square
brackets for units.}
\label{tracks}
\end{figure}
    
```

---

238     %\bibliography{igsrefs}

239     %\bibliographystyle{igs}

240   5. Run your paper through  $\LaTeX$  *twice* more.

241   The IGS do not need your bib or bbl files. Note that  $\BibTeX$  will lose the second initial in the entry ‘Box  
 242   JE’, for example, if it has been typed as ‘{J.E.} Box’ in the bib file. This is because any text in an entry  
 243   enclosed in { } will be treated as a single unit, and will not be further parsed. Prof. Box’s name will typeset  
 244   correctly if entered as ‘J. E. Box’ in the bib file.

245   If you have cited 16 references from the bib database, e.g. (Rignot and Steffen, 2008), (Rignot and  
 246   others, 2008), (Motyka and others, 2011), (Morlighem and others, 2010), (Morlighem and others, 2011),  
 247   (Seroussi and others, 2011), (Yan and others, 2013), (Rogozhina and others, 2012), (Hanna and others,

248 2013), (Goelzer and others, 2013), (Lucas-Picher and others, 2012), (Edwards and others, 2014), (Gladstone  
 249 and others, 2010), (Morlighem and others, 2013), (Goldberg and Sergienko, 2011) and (Paterson, 1994),  
 250 the output will be just those 16 references and they will appear at the end of the article.

251 Citations using natbib commands

252 Note that the standard natbib style file has been modified to fall into line with IGS style. The modified  
 253 style file is called igsnatbib.sty (included in this distribution), and works exactly the same as natbib.sty.  
 254 The default IGS house style is (Yan and others, 2013). The following combinations are also available – refer  
 255 to the natbib documentation if you require any further explanation:

(Yan and others, 2013)            `\citep{Yan13}`

(see Yan and others, 2013, p. 34)

`\citep[see] [p.$\,, $34]{Yan13}`

(e.g. Yan and others, 2013)    `\citep[e.g.] []{Yan13}`

(Yan and others, 2013, Section 2.3)

`\citep[Section~2.3]{Yan13}`

(Yan and others, 2013; Edwards and others, 2014)

`\citep{Yan13, Edwards14}`

256 Yan and others (2013); Edwards and others (2014)

`\cite{Yan13, Edwards14}`

Yan and others 2013            `\citealt{Yan13}`

Yan and others (2013)        `\cite{Yan13}`

Yan and others, 2013        `\citealp{Yan13}`

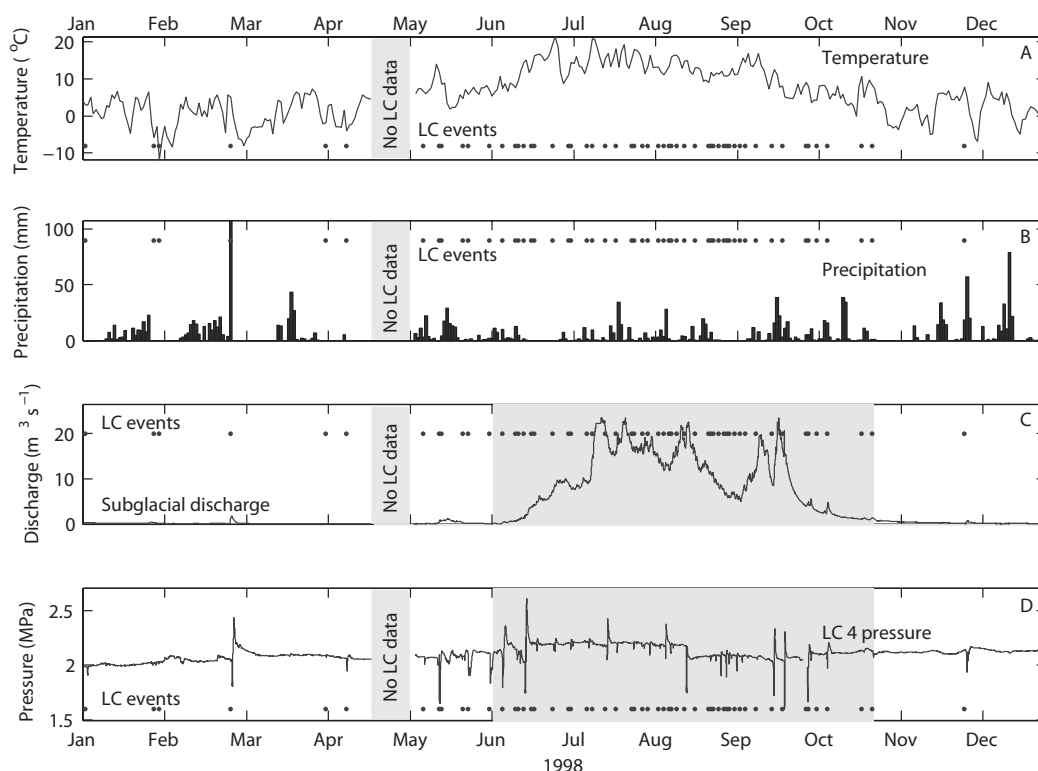
Yan and others                `\citeauthor{Yan13}`

(2013)                        `\citeyearpar{Yan13}`

2013                          `\citeyear{Yan13}`

257 *Manual references*

258 References should be complete and conform to the IGS reference style. Particular points to note are that  
 259 author names should be Surname followed by Initials, and that doi numbers, if available, must be included  
 260 in parentheses at the end of the reference. Authors not using the bibliography style file igs.bst can either  
 261 produce a reference list in plain text or produce the same output at the end of the guide by typing the  
 262 references along the following lines:



**Fig. 2.** Two-column figures should be  $\leq 178$  mm. SSA reconstructed components found by projecting the SSA filters found using the whole 2000 traces in Fig. 4, on trace number 1, ordered by magnitude of variance accounted for in the radar trace.

---

```

\begin{figure*}%fig2, two column
\centering{\includegraphics{72A712Fig02.eps}}
\caption{Two-column figures should be  $\leq 178$  mm. SSA reconstructed components found by
projecting the SSA filters found using the whole 2000 traces in Fig.~4, on trace number 1,
ordered by magnitude of variance accounted for in the radar trace.}
\label{filters}
\end{figure*}

```

---

```

263
264 \begin{thebibliography}{16}
265 \providecommand{\natexlab}[1]{#1}
266 \expandafter\ifx\csname urlstyle\endcsname\relax
267 \providecommand{\doi}[1]{doi: #1}\else

```

```

268 \providecommand{\doi}{doi: \begingroup
269 \urlstyle{rm}\Url}\fi
270
271 \bibitem[\protect\citename{Edwards and others, }2014]
272 {Edwards14}
273 Edwards TL, Fettweis X, Gagliardini O,
274 Gillet-Chaulet F, Goelzer H, Gregory JM, Hoffman M,
275 Huybrechts P, Payne AJ, Perego M, Price S,
276 Quiquet A and Ritz C (2014) Effects of uncertainty
277 in surface mass balance-elevation feedback on
278 projections of the future sea level contribution
279 of the {G}reenland ice sheet. \emph{The Cryosphere},
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401 \end{thebibliography}

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## 447 APPENDIX

448 Start an appendix by typing `\appendix\section{Appendix}`. Appendices appear after the references.

449 Equation numbers automatically start again with (A1).

$$2\eta\kappa\frac{\partial\bar{u}}{\partial t} + \rho_{\mathrm{r}}g\bar{u} + D\kappa^4\bar{u} = \bar{\sigma}_{zz}. \quad (\text{A1})$$

## 450 HANDLING MORE THAN ONE APPENDIX

451 Use the following code to achieve heading APPENDIX A followed by APPENDIX B and APPENDIX C,  
452 with appropriate equation numbers:

```
453
454 \appendix
455 \section{Appendix A}
456
457 \setcounter{equation}{0}
458 \renewcommand\theequation{B\arabic{equation}}
459 \section{Appendix B}
460
461 \setcounter{equation}{0}
462 \renewcommand\theequation{C\arabic{equation}}
463 \section{Appendix C}
```