Geophysical Journal International: LaTeX 2ε style guide for authors

B.L.N. Kennett[1]⋆

[1] *Research School of Earth Sciences, Australian National University, Canberra ACT 0200, Australia*

SUMMARY

This guide is for authors who are preparing papers for *Geophysical Journal International* using the LaTeX 2ε document preparation system and the GJI class file.

Key words: LaTeX 2ε – class files: `gji.cls` – sample text – user guide.

1 INTRODUCTION

In addition to the standard submission of hardcopy from authors, *Geophysical Journal International* accepts machine-readable forms of papers in LaTeX. The layout design for *Geophysical Journal International* has been implemented as a LaTeX 2ε class file derived from the MN style file for Monthly Notices of the Royal Astronomical Society. The GJI classfile is based on the `ARTICLE` style as discussed in the LaTeX manual (Lamport 1986). Commands which differ from the standard LaTeX interface, or which are provided in addition to the standard interface, are explained in this guide. This guide is not a substitute for the LaTeX manual itself. Authors planning to submit their papers in LaTeX are advised to use `gji.cls` as early as possible in the creation of their files. This guide is modified from that produced by Woollatt et al (1994) to describe the features of the MN style.

A very accessible guide to the features of LaTeX 2ε and the differences from the earlier version is provided by Kopka & Daly (1995). This reference provides in chapter 9 a summary of LaTeX error messages and also a full description of standard LaTeX commands in Appendix F.

1.1 The GJI document classes

The use of LaTeX document classes allows a simple change of class (or class option) to transform the appearance of your document. The GJI class file preserves the standard LaTeX interface such that any document which can be produced using the standard LaTeX `ARTICLE` class can also be produced with the GJI class. However, the measure (or width of text) is narrower than the default for `ARTICLE`, therefore line breaks will change and long equations may need re-setting.

1.2 General style issues

For general style issues, authors are referred to the 'Instructions for Authors' on the inside back cover of *Geophysical Journal International*. Authors who are interested in the details of style are referred

to Butcher (1992) and The Chicago Manual (1982). The language of the journal is British English and spelling should conform to this.

Use should be made of symbolic references (`\ref`) in order to protect against late changes of order, etc.

1.3 Submission of LaTeX articles to the journal

Papers should initially be submitted in the usual way to: The Executive Secretary, Royal Astronomical Society, *or* the EGS Editor, *or* the DGG editor, *or* the American Editor, *or* the Pacific Region Editor, as set out in the Instructions for Authors on the inside back cover of each issue of Geophysical Journal International. Four hard copies should be supplied including figures, normally using the `[referee]` option, for papers with a high mathematical content the `[mreferee]` option is recommended. In each case a separate page of figure captions is preferred. One of the copies should be single-sided, while the other two should be weight-reduced, by being either single-spaced or double-sided. Copies of figures should also be supplied. Authors should ensure that their figures are suitable (in terms of lettering size, etc.) for the reductions they intend; they should not attempt to include their figures inside a TeX or LaTeX file by using `\special` or one of the style files for figure handling.

Note that articles, or revised versions thereof, may not currently be submitted by electronic mail. However when the article is accepted for publication the LaTeX file can be sent to the publisher by `ftp` together with appropriate forms of figures. Instructions will be provided following acceptance.

2 USING THE GJI CLASS FILE

If the file `gji.cls` is not already in the appropriate system directory for LaTeX files, either arrange for it to be put there, or copy it to your working directory. The class file and related material, such as this guide, can be accessed via the journal web-site at http://www.blackwellpublishing.com/journals/gji under *Author Guidelines*.

The GJI document class is implemented as a complete document class, *not* a document class option. In order to use the GJI style, replace `article` by `gji` in the `\documentclass` command at the beginning of your document:

⋆ Pacific Region Office, GJI

```
\documentclass{article}
```

is replaced by

```
\documentclass{gji}
```

In general, the following standard document class options should *not* be used with the GJI style:

(i) `10pt`, `11pt`, `12pt` – unavailable;
(ii) `twoside` (no associated style file) – `twoside` is the default;
(iii) `fleqn`, `leqno`, `titlepage` – should not be used (`fleqn` is already incorporated into the GJI style);
(iv) `twocolumn` – is not necessary as it is the default style.

In LATEX2e the use of postscript fonts and the inclusion of non-standard options is carried out through the `\usepackage` command, rather than as options as in earlier versions. Thus the Times font can be used for text by including

```
\usepackage{times}
```

on the line immediately after the `\documentclass`. If necessary, `ifthen` and `bezier` can be included as packages.

The GJI class file has been designed to operate with the standard version of `lfonts.tex` that is distributed as part of LATEX. If you have access to the source file for this guide, `gjilguid2e.tex`, attempt to typeset it. If you find font problems you might investigate whether a non-standard version of `lfonts.tex` has been installed in your system.

2.1   Additional document class options

The following additional class options are available with the GJI style:

`onecolumn` – to be used *only* when two-column output is unable to accommodate long equations;

`landscape` – for producing wide figures and tables which need to be included in landscape format (i.e. sideways) rather than portrait (i.e. upright). This option is described below.

`doublespacing` – this will double-space your article by setting `\baselinestretch` to 2.

`referee` – 12/20pt text size, single column, designed for submission of papers.

`mreferee` – 11/17pt text size, single column designed for submission of papers with mathematical content.

`camera` – designed for use with computer modern fonts to produce a closer representation of GJI style for camera ready material.

`galley` – no running heads, no attempt to align the bottom of columns.

2.2   Landscape pages

If a table or illustration is too wide to fit the standard measure, it must be turned, with its caption, through 90 degrees anticlockwise. Landscape illustrations and/or tables cannot be produced directly using the GJI style file because TEX itself cannot turn the page, and not all device drivers provide such a facility. The following procedure can be used to produce such pages.

(i) Use the `table*` or `figure*` environments in your document to create the space for your table or figure on the appropriate page of your document. Include an empty caption in this environment to ensure the correct numbering of subsequent tables and figures. For instance, the following code prints a page with the running head, a message half way down and the figure number towards the bottom. If you are including a plate, the running headline is different, and you need to key in the three lines which are marked with `%` `**`, with an appropriate headline.

```
% ** \clearpage
% ** \thispagestyle{plate}
% ** \plate{Opposite p.~812, GJI, \textbf{135}}
\begin{figure*}
  \vbox to220mm{\vfil Landscape figure to
               go here. \vfil}
  \caption{}
  \label{landfig}
\end{figure*}
```

(ii) Create a separate document with the corresponding document style but also with the `landscape` document style option, and include the `\pagestyle` command, as follows:

```
\documentclass[landscape]{gji}
\pagestyle{empty}
```

(iii) Include your complete tables and illustrations (or space for these) with captions using the `table*` and `figure*` environments.

(iv) Before each float environment, use the `\setcounter` command to ensure the correct numbering of the caption. For example,

```
\setcounter{table}{0}
\begin{table*}
 \begin{minipage}{115mm}
 \caption{Images of global seismic tomography.}
 \label{tab1}
 \begin{tabular}{@{}llllcll}
    :
 \end{tabular}
 \end{minipage}
\end{table*}
```

The corresponding example for a figure would be:

```
\clearpage
\setcounter{figure}{12}
\begin{figure*}
 \vspace{144mm}
 \caption{Travel times for regional model.}
 \label{fig13}
\end{figure*}
```

3   ADDITIONAL FACILITIES

In addition to all the standard LATEX design elements, the GJI style includes the following features.

(i) Extended commands for specifying a short version of the title and author(s) for the running headlines;

(ii) A `summary` environment to produce a suitably indented Summary

(iii) An `abstract` environment which produces the GJI style of Summary

(iv) A `keywords` environment and a `\nokeywords` command;

(v) Use of the `description` environment for unnumbered lists.

(vi) A starred version of the `\caption` command to produce captions for continued figures or tables.

In general, once you have used the additional `gji.cls` facilities in your document, do not process it with a standard LATEX style file.

3.1 Titles and author's name

In the GJI style, the title of the article and the author's name (or authors' names) are used both at the beginning of the article for the main title and throughout the article as running headlines at the top of every page. The title is used on odd-numbered pages (rectos) and the author's name appears on even-numbered pages (versos). Although the main heading can run to several lines of text, the running headline must be a single line (≤ 45 characters). Moreover, the main heading can also incorporate new line commands (e.g. \\) but these are not acceptable in a running headline. To enable you to specify an alternative short title and an alternative short author's name, the standard \title and \author commands have been extended to take an optional argument to be used as the running headline. The running headlines for this guide were produced using the following code:

```
\title[Geophys.\ J.\ Int.:
     \LaTeXe\ Guide for Authors]
  {Geophysical Journal International:
   \LaTeXe\ style guide for authors}
```

and

```
\author[B.L.N. Kennett]
   {B.L.N. Kennett$^1$
  \thanks{Pacific Region Office, GJI} \\
 $^{1}$Research School of Earth Sciences,
    Australian National University,
    Canberra ACT \emph{0200}, Australia
 }
```

The \thanks note produces a footnote to the title or author.

3.2 Key words and Summary

At the beginning of your article, the title should be generated in the usual way using the \maketitle command. Immediately following the title you should include a Summary followed by a list of key words. The summary should be enclosed within an summary environment, followed immediately by the key words enclosed in a keywords environment. For example, the titles for this guide were produced by the following source:

```
\maketitle
\begin{summary}
 This guide is for authors who are preparing
 papers for \textit{Geophysical Journal
 International} using the \LaTeXe\ document
 preparation system and the GJI style file.
\end{summary}
\begin{keywords}
 \LaTeXe\ -- class files: \verb"gji.cls"\ --
 sample text -- user guide.
\end{keywords}

\section{Introduction}
  :
```

The heading 'Key words' is included automatically and the key words are followed by vertical space. If, for any reason, there are no key words, you should insert the \nokeywords command immediately after the end of the summary or abstract environment. This ensures that the vertical space after the abstract and/or title

is correct and that any thanks acknowledgments are correctly included at the bottom of the first column. For example,

```
\maketitle
\begin{abstract}
  :
\end{abstract}
\nokeywords

\section{Introduction}
  :
```

Note that the summary and abstract environments have the same effect for the documentclass gji.cls

3.3 Lists

The GJI style provides numbered lists using the enumerate environment and unnumbered lists using the description environment with an empty label. Bulleted lists are not part of the GJI style and the itemize environment should not be used.

The enumerated list numbers each list item with roman numerals:

(i) first item
(ii) second item
(iii) third item

Alternative numbering styles can be achieved by inserting a redefinition of the number labelling command after the \begin{enumerate}. For example, the list

(1) first item
(2) second item
(3) etc...

was produced by:

```
\begin{enumerate}
 \renewcommand{\theenumi}{(\arabic{enumi})}
  \item first item
       :
\end{enumerate}
```

Unnumbered lists are provided using the description environment. For example,

First unnumbered item which has no label and is indented from the left margin.
Second unnumbered item.
Third unnumbered item.

was produced by,

```
\begin{description}
 \item First unnumbered item...
 \item Second unnumbered item.
 \item Third unnumbered item.
\end{description}
```

3.4 Captions for continued figures and tables

The \caption* command may be used to produce a caption with the same number as the previous caption (for the corresponding type of float). For instance, if a very large table does not fit on one page, it must be split into two floats; the second float should use the caption* command with a suitable caption:

Figure 1. An example figure in which space has been left for the artwork.

```
\begin{table}
 \caption*{-- \textit{continued}}
  \begin{tabular}{@{}lccll}
  :
  \end{tabular}
\end{table}
```

4   SOME GUIDELINES FOR USING STANDARD FACILITIES

The following notes may help you achieve the best effects with the GJI style file.

4.1   Sections

LaTeX provides five levels of section headings and they are all defined in the GJI style file:

```
\section
\subsection
\subsubsection
\paragraph
\subparagraph
```

Section numbers are given for section, subsection, subsubsection and paragraph headings. Section headings are automatically converted to upper case; if you need any other style, see the example in section 5.

If you find your section/subsection (etc.) headings are wrapping round, you must use the * to end individual lines and include the optional argument [] in the section command. This ensures that the turnover is flushleft.

4.2   Illustrations (or figures)

The GJI style will cope with positioning of your illustrations and you should not use the positional qualifiers on the figure environment which would override these decisions. See 'Instructions for Authors' in *Geophysical Journal International* for submission of artwork. Figure captions should be below the figure itself, therefore the \caption command should appear after the figure or space left for an illustration. For example, Fig. 1 is produced using the following commands:

Table 1. Seismic velocities at major discontinuities.

Class	depth	radius	α_-	α_+	β_-	β_+
ICB	5154	1217	11.091	10.258	3.438	0.
CMB	2889	3482	8.009	13.691	0.	7.301

The ICB represents the boundary between the inner and outer cores and the CMB the boundary between the core and the mantle. Velocities with subscript $-$ are evaluated just below the discontinuity and those with subscript $+$ are evaluated just above the discontinuity.

```
\begin{figure}
 \vspace{5.5cm}
 \caption{An example figure in which space has
          been left for the artwork.}
 \label{sample-figure}
\end{figure}
```

Where a figure needs to span two-columns the figure* environment should be used as in Fig. 2 using the following commands

```
\begin{figure*}
 \vspace{5.5cm}
   \caption{An example figure spanning two-columns
     in which space has been left for the artwork.}
   \label{twocol-figure}
\end{figure*}
```

4.3   Tables

The GJI style will cope with positioning of your tables and you should not use the positional qualifiers on the table environment which would override these decisions. Table captions should be at the top, therefore the \caption command should appear before the body of the table.

The tabular environment can be used to produce tables with single horizontal rules, which are allowed, if desired, at the head and foot only. This environment has been modified for the GJI style in the following ways:

(i)   additional vertical space is inserted on either side of a rule;
(ii)   vertical lines are not produced.

Commands to redefine quantities such as \arraystretch should be omitted. For example, Table 1 is produced using the following commands.

```
\begin{table}
 \caption{Seismic velocities at major
          discontinuities.}
 \label{symbols}
 \begin{tabular}{@{}lccccccc}
  Class & depth & radius
       & $\alpha _{-}$ & $\alpha _{+}$
       & $\beta _{-}$ & $\beta _{+}$ \\
  ICB & 5154 & 1217 & 11.091 & 10.258
       & 3.438 &  0. \\
  CMB & 2889 & 3482 & 8.009 & 13.691
       & 0. & 7.301 \\
 \end{tabular}

 \medskip
 The ICB represents the boundary ...
 ... evaluated just above the discontinuity.

\end{table}
```

Figure 2. An example figure spanning two-columns in which space has been left for the artwork.

If you have a table that is to extend over two columns, you need to use `table*` in a minipage environment, i.e., you can say

```
\begin{table*}
\begin{minipage}{80mm}
 \caption{Caption which will wrap round to the
          width of the minipage environment.}
 \begin{tabular}{%
          :
 \end{tabular}
\end{minipage}
\end{table*}
```

The width of the minipage should more or less be the width of your table, so you can only guess on a value on the first pass. The value will have to be adjusted when your article is finally typeset, so don't worry about making it the exact size.

4.4 Running headlines

As described above, the title of the article and the author's name (or authors' names) are used as running headlines at the top of every page. The headline on right pages can list up to three names; for more than three use et al. The `\pagestyle` and `\thispagestyle` commands should *not* be used. Similarly, the commands `\markright` and `\markboth` should not be necessary.

4.5 Typesetting mathematics

4.5.1 Displayed mathematics

The GJI style will set displayed mathematics flush with the left margin, provided that you use the LATEX standard of open and closed square brackets as delimiters. The equation

$$\sum_{i=1}^{p} \lambda_i = \text{trace}(\mathbf{S})$$

was typeset in the GJI style using the commands

```
\[
 \sum_{i=1}^p \lambda_i =
{\mathrm{trace}}(\mathbf{S})
\]
```

This correct positioning should be compared with that for the following centred equation,

$$\alpha_{j+1} > \bar{\alpha} + ks_\alpha$$

which was (wrongly) typeset using double dollars as follows:

```
$$ \alpha_{j+1} > \bar{\alpha}+ks_{\alpha} $$
```

Note that `\mathrm` will produce a roman character in math mode.

For numbered equations use the `equation` and `eqnarray` environments which will give the correct positioning. If equation numbering by section is required the command `\eqsecnum` should appear after `begin{document}` at the head of the file.

4.5.2 Bold math italic

The class file provides a font `\mitbf` defined as:

```
\newcommand{\mitbf}[1]{
  \hbox{\mathversion{bold}$#1$}}
```

Which can be used as follows, to typset the equation

$$d(\boldsymbol{s_{t_u}}) = \langle [RM(\boldsymbol{x_y} + \boldsymbol{s_t}) - RM(\boldsymbol{x_y})]^2 \rangle \tag{1}$$

the input should be

```
\begin{equation}
  d(\mitbf{{s_{t_u}}}) = \langle [RM(\mitbf{{x_y}}
  + \mitbf{{s_t}}) - RM(\mitbf{{x_y}})]^2 \rangle
\end{equation}
```

If you are using version 1 of the New Font Selection Scheme, you may have some messages in your log file that read something like "Warning: Font/shape 'cmm/b/it' in size <9> not available on input line 649. Warning: Using external font 'cmmi9' instead on input line 649." If you have such messages, your system will have substituted math italic characters where you wanted bold math italic ones: you are advised to upgrade to version 2.

4.5.3 Bold Greek

To get bold Greek you use the same method as for bold math italic. Thus you can input

```
\[ \mitbf{{\alpha_{\mu}}} =
\mitbf{\Theta} \alpha. \]
```

to typeset the equation

$$\alpha_\mu = \Theta\alpha.$$

4.6　Points to note in formatting text

A number of text characters require special attention so that LaTeX can properly format a file.

The following characters must be preceded by a backslash or LaTeX will interpret them as commands:

```
$  &  %  #  _  {  and  }
```

must be typed

```
\$  \&  \%  \#  \_  \{  and  \}.
```

LaTeX interprets all double quotes as closing quotes. Therefore quotation marks must be typed as pairs of opening and closing single quotes, for example, ``quoted text.''

Note that LaTeX will not recognize greater than or less than symbols unless they are typed within math commands (`$>$` or `$<$`).

4.6.1　Special symbols

The macros for the special symbols in Tables 2 and 3 have been taken from the Springer Verlag 'Astronomy and Astrophysics' design, with their permission. They are directly compatible and use the same macro names. These symbols will work in all text sizes, but are only guaranteed to work in text and displaystyles. Some of the symbols will not get any smaller when they are used in sub- or superscripts, and will therefore be displayed at the wrong size. Don't worry about this as the typesetter will be able to sort this out.

The command `\chemical` is provided to set chemical species with an even level for subscripts (not produced in standard mathematics mode). Thus `\chemical{Fe_{2}^{2+}Cr_{2}O_{4}}` will produce $Fe_2^{2+}Cr_2O_4$.

4.7　Bibliography

Two methods are provided for managing citations and references. The first approach uses the `\begin{thebibliography}{}` and `\end{thebibliography}{}` commands.

The second approach uses a simplified scheme using `\begin{references}` and `\end{references}` commands.

References to published literature should be quoted in text by author and date; e.g. Draine (1978) or (Begelman, Blandford & Rees 1984). Where more than one reference is cited having the same author(s) and date, the letters a,b,c, ... should follow the date; e.g. Smith (1988a), Smith (1988b), etc. The first time you introduce a three-author paper, you should list all three authors at the first citation, and thereafter, use et al.

4.7.1　Bibliography References in the text

References in the text are given by author and date, and, whichever method is used to produce the bibliography, the references in the text are done in the same way. Each bibliographical entry has a key, which is assigned by the author and used to refer to that entry in the text. There is one form of citation – `\cite{key}` – to produce the author and date, and another form – `\shortcite{key}` – which produces the date only. Thus, Rutherford & Hawker (1981) is produced by

```
Rutherford \& Hawker \shortcite{rh}
```

while (Hinderer 1986) is produced by

```
\cite{hi}
```

4.7.2　The bibliography

The following listing shows some references prepared in the style of the journal; the code produces the references at the end of this guide. The following rules apply for the ordering of your references:

　(i)　if an author has written several papers, some with other authors, the rule is that the single-author papers precede the two-author papers, which, in turn, precede the multi-author papers;

　(ii)　within the two-author paper citations, the order is determined by the second author's surname, regardless of date;

　(iii)　within the multi-author paper citiations, the order is chronological, regardless of author's surnames.

```
\begin{thebibliography}{}
  \bibitem[\protect\citename{Butcher }1992]{bu}
    Butcher J. 1992. \textit{Copy-editing: The
    Cambridge Handbook}, 3rd edn, Cambridge
    Univ. Press, Cambridge.
  \bibitem[\protect\citename{The Chicago Manual }%
    1982]{cm} \textit{The Chicago Manual of Style},
    Univ. Chicago Press, Chicago, 1982.
  \bibitem[\protect\citename{Chao }1985]{ch}
    Chao, B. F., 1985. Normal mode study of the
    Earth's rigid body motions,
    \textit{Geophys. Res. Lett.}, \textbf{12}, 526-529.
  \bibitem[\protect\citename{Hinderer }1986]{hi}
    Hinderer, J., 1986. Resonance effects of the
    earth's fluid core in earth rotation,
    in \textit{Solved and Unsolved Problems},
    pp. 277-296, ed. Cazenave A., Reidel,
    Dordrecht.
  \bibitem[\protect\citename{Lamport }1986]{la}
    Lamport L., 1986, \LaTeX: \textit{A Document
    Preparation System}, Addison--Wesley, New York
  \bibitem[\protect\citename{Lindberg }1986]{li}
    Lindberg, C., 1986. Multiple taper harmonic
    analysis of terrestrial free oscillations,
    \textit{PhD thesis}, University of California.
  \bibitem[\protect\citename{Maupin }1992]{ma}
    Maupin, V., 1992. Modelling of laterally
    trapped surface waves with application to
    Rayleigh waves in the Hawaiian swell,
    \textit{Geophys. J. Int.}, \textbf{110}, 553-570.
  \bibitem[\protect\citename{Rutherford
    \& Hawker }1981]{rh} Rutherford, S. R.
    \& Hawker, K. E., 1981, Consistent coupled
    mode theory of sound propagation for a
    class of non-separable problems,
    \textit{J. acoust. Soc. Am.}, \textbf{71},
    554-564
\end{thebibliography}
```

Each entry takes the form

```
\bibitem[\protect\citename{Author(s), }%
  Date]{tag} Bibliography entry
```

Table 2. Special symbols which can only be used in math mode.

Input	Explanation	Output	Input	Explanation	Output
\la	less or approx	$\lesssim$	\ga	greater or approx	$\gtrsim$
\getsto	gets over to	$\leftrightharpoons$	\cor	corresponds to	$\hat{=}$
\lid	less or equal	$\leqq$	\gid	greater or equal	$\geqq$
\sol	similar over less	$\lesssim$	\sog	similar over greater	$\gtrsim$
\lse	less over simeq	$\lesssim$	\gse	greater over simeq	$\gtrsim$
\grole	greater over less	$\gtrless$	\leogr	less over greater	$\lessgtr$
\loa	less over approx	$\lessapprox$	\goa	greater over approx	$\gtrapprox$

where `Author(s)` should be the author names as they are cited in the text, `Date` is the date to be cited in the text, and `tag` is the tag that is to be used as an argument for the `\cite{}` and `\shortcite{}` commands. `Bibliography entry` should be the material that is to appear in the bibliography, suitably formatted.

4.7.3 Simplified References and Citations

The second approach to referencing is taken with permission from the American Geophysical Union Latex macros

The reference section is started using a `\begin{references}` command which will automatically produce a correctly formatted "Reference" head. Each reference is then preceded by a `\reference` command. It is the author's responsibility to place bibliographic reference information in the proper order with correct punctuation. After the last reference in your reference section, type an `\end{references}` command.

Authors may enter properly formatted citations directly in the manuscript text and enclose those citations in `\markcite{}` commands. This approach marks all citations in your manuscript, but there is no interaction between the `\markcite` commands and the reference section.

To create in-text citations, enclose each citation within a `\markcite` command. There are two ways to include in-text citations, depending on the way you phrase your sentence. You may either include an entire reference within brackets (Merritt et al., 1996) or you may mention the author as part of your sentence and include only the year in brackets, as in Ono (1996).

As an example

```
\begin{references}
\reference
Azimi, Sh.A., Kalinin, A.Y., Kalinin, V.B.,
\& Pivovarov, B.L., 1968.
Impulse and transient characteristics of media
with linear and quadratic absorption laws,
\textit{Izv. Earth Phys.} (English Transl.),
\textbf{2}, 88--93.
\reference
Dahlen, F.A., \& Smith, M.L., 1975.
The influence of rotation on the free
oscillations of the Earth,
\textit{Phil. Trans. R. Soc. London Ser. A},
\textbf{279}, 143--167.
\reference
Durek, J.J., Ritzwoller, M.H.,
\& Woodhouse, J.H., 1993.
Constraining upper mantle anelasticity
using surface wave amplitude anomalies,
```

```
\gji, \textbf{114}, 249--272.
\end{references}
```

produces the reference list

REFERENCES

Azimi, Sh.A., Kalinin, A.Y., Kalinin, V.B., & Pivovarov, B.L., 1968. Impulse and transient characteristics of media with linear and quadratic absorption laws, *Izv. Earth Phys.* (English Transl.), **2**, 88–93.

Dahlen, F.A., & Smith, M.L., 1975. The influence of rotation on the free oscillations of the Earth, *Phil. Trans. R. Soc. London Ser. A*, **279**, 143–167.

Durek, J.J., Ritzwoller, M.H., & Woodhouse, J.H., 1993. Constraining upper mantle anelasticity using surface wave amplitude anomalies, *Geophys. J Int.*, **114**, 249–272.

4.7.4 Common Journals

The following abbreviations are provided for commonly cited journals and can be used directly in the bibliography.

In the following table the abbreviation and the form of the associated entry are presented

\areps	*Ann. Rev. Earth Planet Sci.,*
\bssa	*Bull. seism. Soc. Am.,*
\eos	*Eos Trans. AGU,*
\eps	*Earth Planets Space,*
\epsl	*Earth Planet. Sci. Lett.,*
\gca	*Geochim. Cosmochim. Acta,*
\geo	*Geology,*
\geop	*Geophysics,*
\gji	*Geophys. J Int.,*
\gjras	*Geophys. J. R. astr. Soc.,*
\grl	*Geophys. Res. Lett.,*
\gsab	*Geol. Soc. Am. Bull.,*
\gs	*Geophys. Surv.,*
\jgr	*J. geophys. Res.,*
\jseis	*J. Seismology,*
\mnras	*Mon. Not. R. astr. Soc.,*
\pag	*Pure Appl. Geophys.,*
\pepi	*Phys. Earth Planet. Inter.,*
\rg	*Rev. Geophys.,*
\tecto	*Tectonophysics,*

4.8 Appendices

The appendices in this guide were generated by typing:

```
\appendix
\section{For authors}
```

Table 3. Special symbols which don't have to be used in math mode.

Input	Explanation	Output	Input	Explanation	Output
\sun	sun symbol	⊙	\earth	earth symbol	⊕
\degr	degree	°	\micron	μm	μm
\diameter	diameter	⌀	\sq	square	□
\fd	fraction of day	ᵈ	\fh	fraction of hour	ʰ
\fm	fraction of minute	ᵐ	\fs	fraction of second	ˢ
\fdg	fraction of degree	°	\fp	fraction of period	ᵖ
\farcs	fraction of arcsecond	ʺ	\farcm	fraction of arcmin	ʹ
\arcsec	arcsecond	ʺ	\arcmin	arcminute	ʹ

```
       :
\section{For editors}
```

You only need to type \appendix once. Thereafter, every \section command will generate a new appendix which will be numbered A, B, etc.

If figure captions are to provided after an appendix the figure number can be reset to avoid extraneous labelling using the command \resetfigno.

5   EXAMPLE OF SECTION HEADING WITH
SMALL CAPS**, lowercase,** *ITALIC***, AND BOLD
GREEK SUCH AS** μ^{κ}

This can be built up using text commands and the `mitbf` command introduced above

```
\section[]{Example of section heading with\\*
  {\mdseries \textsc{S}\lowercase{\textsc{mall}}
  \textsc{C}\lowercase{\textsc{aps}}},
  \lowercase{lowercase},
  \textit{ italic}, and bold\\* Greek such as
  $\mitbf{{\mu^\kappa}}$}\label{headings}
```

5.1   Acknowledgments

Acknowledgments after the main text and before the appendices can be included with the `acknowledgments` environment, as

```
\begin{acknowledgments}
We wish to thank ...
\end{acknowledgments}
```

There is also a corresponding `acknowledgment` environment for a single acknowledgment.

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APPENDIX A: FOR AUTHORS

Table 4 is a list of design macros which are unique to GJI. The list displays each macro's name and description.

APPENDIX B: FOR EDITORS

The additional features shown in Table 5 may be used for production purposes.

This paper has been produced using the Blackwell Scientific Publications GJI LATEX2e class file.

Table 4. Authors' notes.

`\title[optional short title]{long title}`	short title used in running head
`\author[optional short author(s)]{long author(s)}`	short author(s) used in running head
`\begin{abstract}...\end{abstract}`	for summary on titlepage
`\begin{summary}...\end{summary}`	for abstract on titlepage
`\begin{keywords}...\end{keywords}`	for keywords on titlepage
`\nokeywords`	if there are no keywords on titlepage
`\begin{figure*}...\end{figure*}`	for a double spanning figure in two-column mode
`\begin{table*}...\end{table*}`	for a double spanning table in two-column mode
`\caption*`	for continuation figure captions
`\resetfigno`	resets figures numbers after an appendix
`[referee]`	documentclass option for 12/20pt, single col, for manuscript submission
`[mreferee]`	documentclass option for 11/17pt, single col, for submission of papers with extensiv

Table 5. Editors' notes.

`\pagerange{000--000}`	for catchline, note use of en-rule
`\pagerange{L00--L00}`	for letters option, used in catchline
`\volume{000}`	volume number, for catchline
`\pubyear{0000}`	publication year, for catchline
`\microfiche{GJI000/0}`	for articles accompanied by microfiche
`\journal`	replace the whole catchline at one go
`[doublespacing]`	documentclass option for doublespacing
`[galley]`	documentclass option for running to galley
`[landscape]`	documentclass option for landscape illustrations
`[fasttrack]`	documentclass option, for rapid short communications (adds F to folios)
`[onecolumn]`	documentclass option for one-column
`\bsp`	typesets the final phrase 'This paper has been produced using the Blackwell Publishing GJI LaTeX2e class file.'