

# The `sidecap` package

Rolf Niepraschk (`niepraschk@ptb.de`)      Hubert Gäßlein

v1.7a – 2023/01/24

## Abstract

This package defines the new environments `SCfigure` and `SCtable`, analogous to `figure` and `table`, which make it easy to typeset captions sideways.

Additionally, a `wide` environment is defined; it allows to use the margin area, e. g., for figures wider than `\textwidth`.

## 1 Introduction

In some cases it may be useful to typeset the caption aside the figure or the table. For this purpose the package `sidecap` defines the new environments `SCfigure` and `SCtable`. The figure or the table and the caption are put into two minipages that are positioned side by side and centered as a whole. The space between the minipages is `\sidecaptionsep`. The correct positioning with respect to left and right pages requires at least two compilation runs.

## 2 Usage

```
\usepackage[<option>]{sidecap}
\begin{SCtable} [<relwidth>][<float>] ... \end{SCtable}
\begin{SCfigure} [<relwidth>][<float>] ... \end{SCfigure}
\begin{SCtable*} [<relwidth>][<float>] ... \end{SCtable*}
\begin{SCfigure*} [<relwidth>][<float>] ... \end{SCfigure*}
```

`<option>` – `outercaption` (default): Caption appears left on left pages and right on right pages.

`innercaption`: Caption appears right on left pages and left on right pages.

`leftcaption`, `rightcaption`: Caption is always on the left or right, respectively.

`wide`: The floating objects may extend into the margin area.

`raggedright`, `raggedleft`, `ragged`: Better justification for small captions. The `ragged2e` package is used if available.

`<relwidth>` – optional; caption width relative to the width of the figure or table. A large value (e.g., 50) reserves the maximum width that is possible. Default is `\sidecaptionrelwidth` (which is initialized to 1.0).

`<float>` – optional; like the floating position parameter of the original table/figure environments. Default is `tbp`.

```
\begin{wide} ... \end{wide}
```

The `wide` environment may be used inside `figure` and `table` environments as well as in the normal text.

### 3 Required packages

This package requires the standard L<sup>A</sup>T<sub>E</sub>X package `ifthen`.

### 4 Supported packages

This package is compatible with L<sup>A</sup>T<sub>E</sub>X package `hyperref` (tested with version 6.71v as of 2001/11/12). If the `raggedright` or `raggedleft` or `ragged` package option has been given, then captions will be set with ragged margin. The `ragged2e` package will be used if it can be found.

## 5 The implementation

### 5.1 Register allocation and auxiliary macros

```

1  {*package}
2
3 \RequirePackage{ifthen}
4
5 \@ifdefinable{\SC@BOXWD}{\newdimen\SC@BOXWD}
6 \@ifdefinable{\SC@CAPWD}{\newdimen\SC@CAPWD}
7 % 2 noetig ???
8 \@ifdefinable{\SC@tempdima}{\newdimen\SC@tempdima}
9 \@ifdefinable{\SC@tempdimb}{\newdimen\SC@tempdimb}
10 \newcounter{SC@C} \newsavebox{\SC@BOX} \newcommand*\SC@FLOAT(){}
11 \newcommand*\SC@IDENT[1]{\SC@number\value{SC@C}}
12 \newcommand*\SC@label[1]{\gdef\SC@LABtext{#1}\ignorespaces}
13 \newcommand*\SC@orig@caption{} \newcommand*\SC@orig@label{}
14 \newcommand*\sidecaptionsep{}
15 \edef\sidecaptionsep{\the\marginparsep}
16 \newcommand*\sidecaptionrelwidth{1.0}
17 \newcommand*\sidecaptionvpos[2]{% 2002/08/31
18   \namedef{SC@#1@vpos}{#2}%
19 }
20
21 \newboolean{SC@wide}
22 \def\SC@widefalse{\global\let\ifSC@wide\iffalse}
23 \def\SC@widetrue {\global\let\ifSC@wide\iftrue}
24
25 % Kann man auf dieses Laengenregister verzichten? Nein! (RN) <*****>
26
27 \newcommand*\SC@calcwds[1]{%
28   \SC@tempdima#1\relax
29   \SC@BOXWD\wd\SC@BOX
30   \SC@CAPWD\SC@fraction\SC@BOXWD
31   \SC@tempdima\SC@BOXWD
32   \advance\SC@tempdima\SC@CAPWD

```

```

33  \advance\@tempdima\sidecaptionsep
34  \ifdim\@tempdima>\SC@tempdima
35    \advance\SC@CAPWD-\@tempdima
36    \advance\SC@CAPWD\SC@tempdima
37  \fi
38  \SC@tempdimb\@tempdima
39 }
40
41 \%newcommand*\isSC@WIDEi}[2]{#2} %default: false
42 \%newcommand*\isSC@WIDEii}[2]{#2} %default: false
43 \newcommand*\isSC@WIDEi}[2]{\ifSC@wide#1\else#2\fi} %default: false
44 \newcommand*\isSC@WIDEii}[2]{\ifSC@wide#1\else#2\fi} %default: false
45
46 \%newcommand*\isSC@First}[2]{#1} %default: true
47
48 \newcommand*\SC@justify{}
49 \newcommand*\SC@justify@caption{}
50 \newcommand*\SC@justify@body{}
51
52 \newboolean{SC@origRagged} \setboolean{SC@origRagged}{false} %% ???
\\SC@SaveCommands
53 \newcommand*\SC@SaveCommands}{%
54   \let\SC@orig@caption=\caption \let\SC@orig@label=\label%
55 }
56 \SC@SaveCommands % necessary? or even wrong?

```

## 5.2 Package `hyperref` compatibility

Note: The `\pageref` doesn't work with `hyperref` . . . :-(

```

57 \if@twoside
58   \newcommand*\isSC@ODD}[2]{%
59     \ifthenelse{\isodd{\pageref{\SC@IDENT}}}{#1}{#2}}
60 \else
61   \newcommand*\isSC@ODD}[2]{#1}%
62 \fi

```

## 5.3 Option processing

```

63 \DeclareOption{innercaption}{%
64   \renewcommand*\SC@FLOAT}[2]{%
65     \isSC@ODD{#1}\hspace{\sidecaptionsep}{#2} {#2}\hspace{\sidecaptionsep}{#1}}%
66   \renewcommand*\SC@justify@caption{%
67     \isSC@ODD{\RaggedLeft}{\RaggedRight}}
68 }
69
70 \DeclareOption{outercaption}{%
71   \renewcommand*\SC@FLOAT}[2]{%
72     \isSC@ODD{#2}\hspace{\sidecaptionsep}{#1} {#1}\hspace{\sidecaptionsep}{#2}}%
73   \renewcommand*\SC@justify@caption{%
74     \isSC@ODD{\RaggedRight}{\RaggedLeft}}
75 }
76

```

```

77 \DeclareOption{rightcaption}{%
78   \renewcommand*{\SC@FLOAT}[2]{{#2}\hspace{\sidecaptionsep}{#1}}%
79   \def\SC@justify@caption{\RaggedRight}%
80 }
81
82 \DeclareOption{leftcaption}{%
83   \renewcommand*{\SC@FLOAT}[2]{{#1}\hspace{\sidecaptionsep}{#2}}%
84   \def\SC@justify@caption{\RaggedLeft}%
85 }
86 \DeclareOption{wide}{%
87   \renewcommand*{\isSC@WIDEi}[2]{\if@twocolumn #2\else #1\fi}%
88   \renewcommand*{\isSC@WIDEii}[2]{#1}%
89
These ‘ragged...’ options should stay here, behind the ‘...caption’ options!
90 \DeclareOption{raggedright}{%
91   \def\SC@justify{\RaggedRight}%
92
93 \DeclareOption{raggedleft}{%
94   \def\SC@justify{\RaggedLeft}%
95 }
96 \DeclareOption{origragged}{\setboolean{SC@origRagged}{true}}
97 \DeclareOption{margincaption}{%
98   \ds@outercaption\ds@outerbody\ds@wide
99   \let\ds@innercaption\empty
100  \let\ds@leftcaption\empty
101  \let\ds@rightcaption\empty
102  \def\SC@calcwds#1{%
103    \SC@tempdimb#1\relax
104    \SC@BOXWD\SC@tempdimb % *-form !!! ??
105    \advance\SC@BOXWD-\marginparwidth
106    \advance\SC@BOXWD-\marginparsep
107    \SC@CAPWD\marginparwidth
108  }%
109 }
110 \DeclareOption{innerbody}{%
111   \def\SC@justify@body{%
112     \isSC@ODD{\RaggedRight}{\RaggedLeft}%
113   }%
114
115 \DeclareOption{outerbody}{%
116   \def\SC@justify@body{%
117     \isSC@ODD{\RaggedLeft}{\RaggedRight}%
118   }%
119
120 \DeclareOption{centerbody}{%
121   \def\SC@justify@body{\Centering}%
122 }%
123
124 \DeclareOption{rightbody}{%
125   \def\SC@justify@body{\RaggedLeft}%
126 }

```

```

127
128 \DeclareOption{leftbody}{%
129   \def\SC@justify@body{\RaggedRight}%
130 }
131 \ExecuteOptions{outercaption}
132 %%\InputIfFileExists{sidecap.cfg}{}{} % hier ? % 2002/06/14
133 \ProcessOptions\relax
134 \AtBeginDocument{%
135   \ifSC@origRagged\else
136     \c@ifpackageloaded{ragged2e}{}%
137   {%
138     \IfFileExists{ragged2e.sty}{}%
139     \RequirePackage[NewParameters]{ragged2e}%
140     {%
141       \PackageWarningNoLine{sidecap}%
142       Package 'ragged2e' not found -- expect bad formatting}%
143     }%
144   }%
145 \fi
146 \c@ifundefined{RaggedRight}{}%
147 {%
148   \let\RaggedLeft\raggedleft
149   \let\RaggedRight\raggedright
150   \let\Centering\centering
151 }{}%
152 }

```

## 5.4 User-level macros (environments)

- SCfigure** (*env.*) Simply passes the first (optional) parameter and the required one, in this case ‘figure’, to **SC@float**. The figure caption should be bottom aligned.

```

153
154 %\newcommand*\SCfigureVpos{b}%
155 % 2002/06/14
156 \c@ifdefinable\SC@figure@vpos{\def\SC@figure@vpos{b}}%
157 \newenvironment{SCfigure}{\SC@float[\SC@figure@vpos]{figure}}{\endSC@float}
158 \newenvironment{SCfigure*}{\SC@dblfloat[\SC@figure@vpos]{figure}}{\endSC@dblfloat}

```

- SCtable** (*env.*) Simply passes the first (optional) parameter and the required one, in this case ‘table’, to **SC@float**. The table caption should be top aligned.

```

159
160 %\newcommand*\SCtableVpos{t}%
161 % 2002/06/14
162 \c@ifdefinable\SC@table@vpos{\def\SC@table@vpos{t}}%
163 \newenvironment{SCtable}{\SC@float[\SC@table@vpos]{table}}{\endSC@float}
164 \newenvironment{SCtable*}{\SC@dblfloat[\SC@table@vpos]{table}}{\endSC@dblfloat}

```

- wide** (*env.*) This is an environment that allows to extend the width of the text body (or of a floating environment) by using the margin space.  
It shouldn’t be used in twocolumn text.

```

165 %
166 \newenvironment{wide}{}%
167 {%

```

```

168  \@parboxrestore% 2002/06/14 -- SW-Arch.: wozu? 2002/08/24
169  \advance\linewidth\marginparwidth
170  \advance\linewidth\marginparsep
171  \ifx\label\SC@label
172  {+debug}    \typeout{WIDE: inside SCfloat}%
173      \SC@widetrue
174  \else
175  {+debug}    \typeout{WIDE: outside SCfloat}%
176      \begin{lrbox}\SC@BOX % \begin necessary: --> \noitemerr
177          \minipage\linewidth
178      \fi
179 }%
180 {%
181  \ifx\label\SC@label
182  {+debug}
183  \typeout{WIDE: inside SCfloat}%
184      \%renewcommand*\isSC@WIDEi[2]{\if@twocolumn ##2\else ##1\fi}%
185      \%renewcommand*\isSC@WIDEii[2]{##1}%
186      \%let\isSC@WIDE\isSC@WIDEi
187  \else
188  {+debug}
189  \typeout{WIDE: outside SCfloat}%
190      \endminipage
191      \end{lrbox}%
192      \global\advance\c@SC@C\@ne
193      \SC@orig@label{\SC@IDENT}%
194      \trivlist \item\relax
195      \isSC@ODD{\def\SC@hpos{1}}{\def\SC@hpos{r}}%
196  {+debug}
197  \typeout{WIDE: \string\linewidth=\the\linewidth}%
198      \noindent\makebox[\textwidth][\SC@hpos]{\copy\SC@BOX}%
199      \endtrivlist
200  \fi
201 }

```

## 5.5 Internal macros

### 5.5.1 Collecting arguments

The new internal float environment, similar/analogous to L<sup>A</sup>T<sub>E</sub>X's `\@float` environment.

Syntax: `\SC@float[<vpos>]{<name>}[<relwidth>][<fps>]`

- Parameter `<vpos>` (optional) is the vertical positioning of the caption.
- Parameter `<name>` (required) is the name of the ‘original’ L<sup>A</sup>T<sub>E</sub>X floating environment (e.g., ‘figure’ or ‘table’).
- Parameter `<relwidth>` (optional) is the desired relative width of the caption.
- Parameter `<fps>` (optional) is the usual L<sup>A</sup>T<sub>E</sub>X float positioning specifier.

The usual ‘cascading’ programming style is applied (cf. L<sup>A</sup>T<sub>E</sub>X’s `\@float`).

`\SC@float` Initially, the first optional parameter is checked for.

```
203 \def\SC@float{\SC@SaveCommands@ifnextchar[\SC@xfloat{\SC@xfloat[c]}]}
```

`\SC@xfloat` Then the first and second parameters are consumed and the third one is checked for.

```
204 \def\SC@xfloat[#1]#2{\ifnextchar[%
205   {\SC@yfloat[#1]{#2}}%
206   {\SC@zfloat[#1]{#2}{\sidecaptionrelwidth}[@nameuse{fps@#2}]}}
```

`\SC@yfloat` Again, the fourth (and last) parameter is checked for.

```
207 \def\SC@yfloat#1#2[#3]{\ifnextchar[%
208   {\SC@zfloat[#1]{#2}{#3}}%
209   {\SC@zfloat[#1]{#2}{#3}{\nameuse{fps@#2}}}}
```

### 5.5.2 Capturing the float's contents

`\SC@zfloat` Finally, here is the macro that does all the work.

```
210 \def\SC@zfloat#1#2[#4]{%
211   \def\SC@vpos{#1}%
212   \expandafter\edef\csname fps@#2\endcsname{#4}%
213   \def\SC@captype{#2}%
214   \ifx#3\empty\def\SC@fraction{1}\else\def\SC@fraction{#3}\fi%
```

The `\caption` and `\label` commands must be redefined.

```
215 \let\SC@CAPtext\empty \let\SC@OPTCAPtext\empty \let\SC@LABtext\empty%
216 \renewcommand\caption[2][]{\gdef\SC@OPTCAPtext{##1}%
217 \gdef\SC@CAPtext{##2}\ignorespaces}\SC@justify%
218 \let\label=\SC@label%
219 \namedef{fnum@#2}{\mbox{@nameuse{#2name}~@nameuse{the#2}}}% caption2 ?
```

Save the figure or table (or whatever) in a box.

```
220 \SC@widefalse%
221 \begin{lrbox}\SC@BOX % \begin necessary: --> \noitemerr
222 %% \strut%
223 }%
224
```

`\SC@dblfloat` Analogous to L<sup>A</sup>T<sub>E</sub>X's `\dblfloat`.

```
225 \def\SC@dblfloat{%
226   \SC@SaveCommands%
227   \if@twocolumn\let\reserved@a\SC@dbfl\else\let\reserved@a\SC@float\fi%
228   \reserved@a%
229 \def\SC@dbfl{\SC@float}
```

### 5.5.3 Output the float's contents

`\endSC@float` Outputs the figure or table (or whatever) and the caption.

```
230 \def\endSC@float{%
231   %% \strut%
232   \end{lrbox} % \end necessary: --> \noitemerr
233 <+debug> \typeout{onecolumn}%
234 \let\isSC@WIDE\isSC@WIDEi%
235 \def@FLOAT{\@float}\def\end@FLOAT{\end@float}%
```

```

236  \isSC@WIDE%
237  {\@tempdima\textwidth % \columnwidth ???%
238  \advance\@tempdima\marginparwidth%
239  \advance\@tempdima\marginparsep}%
240  {\@tempdima\columnwidth}%
241 {+debug} \typeout{endSC@float: \string\@tempdima=\the\@tempdima}%
242 \endSC@FLOAT\@tempdima}%

```

\endSC@dblfloat Ditto for \*-forms of floats.

```

243 \def\endSC@dblfloat{%
244 \end{lrbox}\end necessary: --> \noitemerr%
245 {+debug} \typeout{two column}%
246 \let\isSC@WIDE\isSC@WIDEii%
247 \def\@FLOAT{\@dblfloat}\def\end@FLOAT{\end@dblfloat}%
248 \isSC@WIDE%
249 {\@tempdima\textwidth%
250 \advance\@tempdima\marginparwidth%
251 \advance\@tempdima\marginparsep}%
252 {\@tempdima\textwidth}%
253 {+debug}%
254 \typeout{endSC@dblfloat: \string\@tempdima=\the\@tempdima}%
255 \endSC@FLOAT\@tempdima}%

```

\endSC@FLOAT Sets the caption width. If caption width plus figure/table width (plus separation space) is too large then the caption width is set equal to the remaining width.

```

256 \def\endSC@FLOAT#1{%
257 \SC@calcwds{#1}%

```

\@FLOAT Calls the L<sup>A</sup>T<sub>E</sub>X float command with the two minipages inside a main minipage.

```

258 \@FLOAT{\SC@captpe}%
259 \abovecaptionskip\z@skip%
260 \belowcaptionskip\z@skip%

```

Creates a label for each figure or table (etc.) for later determination if the page is odd or even. The counter SC@C must be incremented before.

```

261 \global\advance\c@SC@C\one%
262 \SC@orig@label{\SC@IDENT}%

```

\isSC@WIDE

```

263 \isSC@WIDE%
264 {\ifdim\SC@tempdimb>\textwidth % ???%
265 \isSC@ODD{\def\SC@hpos{1}}{\def\SC@hpos{r}}%
266 \else%
267 \def\SC@hpos{c}%
268 \fi%
269 \@tempdimc\textwidth}%
270 {\@tempdimc\SC@tempdima\def\SC@hpos{c}}%
271 \makebox[\@tempdimc][\SC@hpos]{%

```

\SC@FLOAT Has two parameters. The first parameter is the minipage with the caption text inside and the last parameter is the minipage with the body of the figure or table inside.

```

272      \SC@FLOAT%
273      {\minipage[\SC@vpos]{\SC@CAPWD}%
274      %% \nointerlineskip \%offinterlineskip%
275      %% \kernOpt\relax
276      \hrule \height\z@\depth\z@ %% Testen, Doku. (Implementierung) !!!
277      \%show\SC@justify@caption
278 %%%      \tracingall\tracingonline=0
279      \SC@justify
280      \let\arrayparboxrestore\relax % sonst Blocksatz! (\@parboxrestore)
281      \let\usecaptionmargin\relax % sonst Pseudo-Blocksatz, nicht-alternierend!
282 %      \isSC@ODD {\RaggedRight }{\RaggedLeft }
283 %%%      A B C
284 %      \isSC@ODD{\typeout{xxxxx ungerade}}{\typeout{xxxxx gerade}}%
285 %      \def\@makecaption##1##2##1: ##2\endgraf}%
286 % \@parboxrestore
287 % \@setminipage
288 \iffalse
289 % DEBUG:
290      \endgraf
291      \@makecaption{\csname fnum@\SC@captype\endcsname}%
292      {\ignorespaces \SC@CAPtext}%
293      \endgraf
294 \else
295      % \ifthenelse{\equal{\SC@OPTCAPtext}{\empty}}{%
296      % \ifx\SC@OPTCAPtext\empty% Noetig?
297 % FM: strut needed twice for multiline captions
298      \SC@orig@caption[\SC@CAPtext]%
299      {\strut\ignorespaces\SC@CAPtext\unskip\strut}\% \expandafter\protect
300      \else
301 % FM: strut needed twice for multiline captions
302 % FM: if \SC@CAPtext can contain trailing banks then we also need \unskip
303 % FM: (not checked)
304      \SC@orig@caption[\SC@OPTCAPtext]\% \expandafter\protect
305      {\strut\ignorespaces\SC@CAPtext\unskip\strut}\% \expandafter\protect
306      \fi
307      \unskip% ??? Dok. !!!
308      \ifx\SC@LABtext\empty\else
309      \SC@orig@label{\SC@LABtext}\fi\% \expandafter\protect
310 \fi
311 %%%      X Y Z
312      \hrule \height\z@\depth\z@
313      \endminipage}%
314      {\minipage[\SC@vpos]{\SC@BOXWD}%
315      %% \nointerlineskip \%offinterlineskip%
316      %% \kernOpt\relax
317      \hrule \height\z@\depth\z@
318      \SC@justify@body
319      \unhbox\SC@BOX \% \strut \unhbox/\usebox{\SC@BOX}\% TESTEN!
320      \% \kernOpt\relax
321      \hrule \height\z@\depth\z@
322      \endminipage}%
323      }%
324      \end@FLOAT%
325 }

```

```
326 \InputIfFileExists{sidecap.cfg}{}{} % hier ? % 2002/06/14
327 </package>
```

## Change History

v1.0 (RN)		v1.5f (RN)	
General: New .....	1	General: New option ‘raggedleft’ ..	4
v1.1 (RN/HjG)		v1.5g (RN)	
General: First public version .....	1	General: New option ‘ragged’ .....	4
v1.2 (HjG)		v1.5h (RN/HjG)	
General: Proposal for amendments .....	1	General: Environment wide does the right thing now outside SCfloat environments. ....	1
v1.3 (RN/HjG)		Improved compatibility with package hyperref. ....	1
General: Unsuccessful attempt to make star-forms work .....	1	\SC@SaveCommands: Renamed \SC@AtFirstCall ..	3
v1.4c (HjG)		v1.6 (RN)	
General: Successful (?) attempt to make star-forms work, plus some amendments .....	1	General: “Smart” loading of package ragged2e. More simple code for hyperref compatibility (\hypergetpageref). ....	5
v1.4d (RN)		v1.6 (RN/HjG)	
General: New (LPPL) license .....	1	General: New option ‘margincaption’ added. ....	4
v1.5a (RN)		Oneside mode had been forgotten ;-) ....	3
General: New Option and environment ‘wide’; some small changes .....	4	v1.6d (RN/HjG)	
v1.5b (RN)		General: Simplify internal calculations using primitive operators where possible and useful, saving tokens (suggested by Frank Mittelbach). ....	1
General: New Option ‘raggedright’ as suggested by James Kilfiger (mailto:mapdn@csv.warwick.ac.uk) .....	4	v1.6f (RN/HjG)	
v1.5d (RN/HjG)		General: Test for presence of package babel (\org@pageref). ....	5
General: Compatibility with ‘hyperref’, thanks to Heiko Oberdiek .....	3	v1.7a (RN)	
Slight amendments to documentation. ....	1	General: Special handling with \SC@pageref is no longer necessary. ....	5
v1.5e (RN)			
\SC@SaveCommands: \SC@AtFirstCall: Saves the old meaning of \caption and \label at first call of some SC macros (compatibility with ‘hyperref’). ....	3		

## Index

Numbers written in *italic* refer to the page where the corresponding entry is described, the ones underlined to the definition, the rest to the places where the entry is used.

Symbols	\@arrayparboxrestore	.....	280
\@FLOAT	235, 247, <u>258</u> , 258		

\@dblfloat . . . . . 247  
 \@depth 276, 312, 317, 321  
 \@empty . . . . . 99,  
     100, 101, 214,  
     215, 295, 296, 308  
 \@float . . . . . 235  
 \@height . . . . .  
     276, 312, 317, 321  
 \@ifdefinable . . . .  
     5, 6, 8, 9, 155, 161  
 \@ifnextchar . . . . .  
     203, 204, 207  
 \@ifpackageloaded . 136  
 \@ifundefined . . . . . 146  
 \@makecaption . 285, 291  
 \@namedef . . . . . 18, 219  
 \@nameuse . 206, 209, 219  
 \@ne . . . . . 192, 261  
 \@noitemerr . . . . . 176,  
     191, 221, 232, 244  
 \@parboxrestore . . . . .  
     168, 280, 286  
 \@setminipage . . . . . 287  
 \@tempdima . . . . .  
     31, 32, 33, 34,  
     35, 38, 237, 238,  
     239, 240, 241,  
     242, 249, 250,  
     251, 252, 254, 255  
 \@tempdimc 269, 270, 271

**A**

\abovecaptionskip . 259  
 \advance 32, 33, 35, 36,  
     105, 106, 169,  
     170, 192, 238,  
     239, 250, 251, 261  
 \AtBeginDocument . 134

**B**

\begin . . . . . 176, 221  
 \belowcaptionskip . 260

**C**

\c@SC@C . . . . . 192, 261  
 \caption . . . . . 54, 216  
 \Centering . . . . . 121, 150  
 \centering . . . . . 150  
 \columnwidth . 237, 240  
 \copy . . . . . 198  
 \csname . . . . . 212, 291

**D**

\DeclareOption . . . . .  
     ... 63, 70, 77,

**F**

\fi 37, 43, 44, 62, 87,  
     145, 178, 184,

**G**

\gdef . . . . . 22, 23, 79, 84, 90,  
     92, 94, 102, 111,  
     116, 121, 125,  
     129, 155, 161,  
     195, 203, 204,  
     207, 210, 211,  
     213, 214, 225,  
     229, 230, 235,  
     243, 247, 256,  
     265, 267, 270, 285

**H**

\hrule . . . . . 276, 312, 317, 321  
 \hspace . . . . . 65, 72, 78, 83

**I**

\if@twocolumn . . . . .  
     ... 87, 184, 227  
 \if@twoside . . . . . 57  
 \ifdim . . . . . 34, 264  
 \iffalse . . . . . 22, 288  
 \IfFileExists . . . . . 138  
 \ifSC@origRagged . . 135  
 \ifSC@wide . 22, 23, 43, 44  
 \ifthenelse . . . . . 59, 295  
 \iftrue . . . . . 23  
 \ifx . . . . . 171,  
     181, 214, 296, 308  
 \ignorespaces . . . . . 12,  
     217, 292, 299, 305  
 \InputIfFileExists . . . . .  
     ... 132, 326  
 \isodd . . . . . 59  
 \isSC@First . . . . . 46  
 \isSC@ODD . . . . .  
     . 58, 61, 65, 67,  
     72, 74, 112, 117,  
     195, 265, 282, 284  
 \isSC@WIDE . . . . .  
     . 186, 234, 236,  
     246, 248, 263, 263  
 \isSC@WIDEi . . . . . 41,  
     43, 87, 184, 186, 234  
 \isSC@WIDEii . . . . .  
     42, 44, 88, 185, 246  
 \item . . . . . 194

environments:

SCfigure . . . . . 153  
     SCtable . . . . . 159  
     wide . . . . . 165  
     \equal . . . . . 295  
     \ExecuteOptions . . . . 131  
     \expandafter . . . . . 212,  
         299, 304, 305, 309

**K**

\kern . . . . . 275, 316, 320

**L**

\label . . . . . 54, 171, 181, 218  
 \let . . . . . 22, 23, 54, 94, 99,  
     100, 101, 148,  
     149, 150, 186,  
     215, 218, 227,  
     234, 246, 280, 281  
 \linewidth . . . . .  
     . 169, 170, 177, 197

**M**

- \makebox ..... 198, 271
- \marginparsep ... 15, 106, 170, 239, 251
- \marginparwidth 105, 107, 169, 238, 250
- \mbox ..... 219
- \minipage . 177, 273, 314

**N**

- \newboolean ..... 21, 52
- \newcommand ..... . 10, 11, 12, 13, 14, 16, 17, 27, 41, 42, 43, 44, 46, 48, 49, 50, 53, 58, 61, 154, 160
- \newcounter ..... 10
- \newdimen .... 5, 6, 8, 9
- \newenvironment 156, 157, 162, 163, 166
- \newsavebox ..... 10
- \noindent ..... 198
- \nointerlineskip ..... 274, 315
- \number ..... 11

**O**

- \offinterlineskip . ..... 274, 315

**P**

- \PackageWarningNoLine ..... 141
- \pageref ..... 59
- \ProcessOptions ... 133
- \protect ..... . 299, 304, 305, 309

**R**

- \RaggedLeft .... 67, 74, 84, 92, 112, 117, 125, 148, 282
- \raggedleft ..... 148
- \RaggedRight ... 67, 74, 79, 90, 112, 117, 129, 149, 282
- \raggedright ..... 149
- \ref ..... 193, 262
- \relax ..... 28, 103, 133, 194, 275, 280, 281, 316, 320

**S**

- \renewcommand 64, 66, 71, 73, 78, 83, 87, 88, 184, 185, 216
- \RequirePackage . 3, 139
- \reserved@a ... 227, 228

**T**

- \SC@tempdima ..... . 8, 28, 34, 36, 270
- \SC@tempdimb ..... 9, 38, 103, 104, 264
- \SC@vpos .. 211, 273, 314
- \SC@widelfalse .. 22, 220
- \SC@widettrue ... 23, 173
- \SC@xfloat ... 203, 204
- \SC@yfloat ... 205, 207
- \SC@zfloat ..... . 206, 208, 209, 210

**C**

- SCfigure (env.) ..... 153
- SCfigureVpos ..... 154
- SCtable (env.) ..... 159
- SCtableVpos ..... 160
- \setboolean ..... 52, 96
- \show ..... 277
- \sidecaptionrelwidth ..... 16, 206
- \sidecaptionsep ..... 14, 15, 33, 65, 72, 78, 83
- \sidecaptionvpos ... 17
- \string ... 197, 241, 254
- \strut ..... 222, 231, 299, 305, 319

**T**

- \textwidth 198, 237, 249, 252, 264, 269
- \the ... 15, 197, 241, 254
- \tracingall ..... 278
- \tracingonline .... 278
- \trivlist ..... 194
- \typeout 172, 175, 183, 189, 197, 233, 241, 245, 254, 284

**U**

- \unhbox ..... 319
- \unskip 299, 302, 305, 307
- \usebox ..... 198, 319
- \usecaptionmargin . 281

**V**

- \value ..... 11

**W**

- \wd ..... 29
- wide (env.) ..... 165

**Z**

- \z@ ... 276, 312, 317, 321
- \z@skip ..... 259, 260