The sidecap package

Rolf Niepraschk (niepraschk@ptb.de)

Hubert Gäßlein

v1.6f - 2003/06/06

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

⟨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.

\(\lambda relwidth\rangle - \) 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).

\(\forall float \rangle - \text{ 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 LATEX package ifthen.

4 Supported packages

This package is compatible with LATEX 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}{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{} \newcommand*\SC@pageref{}
                  15 \edef\sidecaptionsep{\the\marginparsep}
                  16 \newcommand*\sidecaptionrelwidth{1.0}
                  17 \newcommand*\sidecaptionvpos[2]{% 2002/08/31
                      \@namedef{SC@#1@vpos}{#2}%
                  18
                  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
                      % Kann man auf dieses Laengenregister verzichten? Nein! (RN) <****>
                  27 \newcommand*\SC@calcwidths[1]{%
                      \SC@tempdima#1\relax
                  28
                      \SC@BOXWD\wd\SC@BOX
                  29
                      \SC@CAPWD\SC@fraction\SC@BOXWD
                  30
                      \@tempdima\SC@BOXWD
                  31
                      \advance\@tempdima\SC@CAPWD
                      \advance\@tempdima\sidecaptionsep
                  34
                      \ifdim\@tempdima>\SC@tempdima
                        \advance\SC@CAPWD-\@tempdima
                  35
                        \advance\SC@CAPWD\SC@tempdima
                  36
                      \fi
                  37
                      \SC@tempdimb\@tempdima
                  38
                  39 }
                  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
                  46 \newcommand*{\scalebox[2]{#1} %default: true}
                  48 \newcommand*\SC@justify{}
                  49 \newcommand*\SC@justify@caption{}
                  50 \newcommand*\SC@justify@body{}
                  52 \newboolean{SC@origRagged} \setboolean{SC@origRagged}{false} %% ???
\SC@SaveCommands
                  53 \newcommand*{\SC@SaveCommands}{%
                        \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{\SC@pageref{\SC@IDENT}}}{#1}{#2}}
60 \else
61 \newcommand*{\isSC@ODD}[2]{#1}%
62 \fi
```

5.3 Option processing

```
63 \DeclareOption{innercaption}{%
   \renewcommand*{\SC@FLOAT}[2]{%
     \renewcommand*\SC@justify@caption{%
67
     \isSC@ODD{\RaggedLeft}{\RaggedRight}}
68 }
70 \DeclareOption{outercaption}{%
   \renewcommand*{\SC@FLOAT}[2]{%
71
     72
   \renewcommand*\SC@justify@caption{%
73
     \isSC@ODD{\RaggedRight}{\RaggedLeft}}
74
75 }
76
77 \DeclareOption{rightcaption}{%
   \renewcommand*{\SC@FLOAT}[2]{{#2}\hspace{\sidecaptionsep}{#1}}
79
   \def\SC@justify@caption{\RaggedRight}%
80 }
81
82 \DeclareOption{leftcaption}{%
   \renewcommand*{\SC@FLOAT}[2]{{#1}\hspace{\sidecaptionsep}{#2}}
   \def\SC@justify@caption{\RaggedLeft}%
84
85 }
86 \DeclareOption{wide}{%
    \renewcommand*{\isSC@WIDEi}[2]{\if@twocolumn #2\else #1\fi}% ???
    \renewcommand*{\isSC@WIDEii}[2]{#1}}
These 'ragged...' options should stay here, behind the '... caption' options!
89 \DeclareOption{raggedright}{%
    \def\SC@justify{\RaggedRight}}
91 \DeclareOption{raggedleft}{\%}
    \def\SC@justify{\RaggedLeft}}
93 \DeclareOption{ragged}{%
    \def\SC@justify{\SC@justify@caption}%
```

```
95 }
 96 \DeclareOption{origragged}{\setboolean{SC@origRagged}{true}}
 97 \DeclareOption{margincaption}{%
     \ds@outercaption\ds@outerbody\ds@wide
     \let\ds@innercaption\@empty
 99
100
     \let\ds@leftcaption\@empty
101
     \let\ds@rightcaption\@empty
102
     \def\SC@calcwidths#1{%
       \SC@tempdimb#1\relax
103
       \SC@BOXWD\SC@tempdimb % *-form !!! ???
104
       \verb|\advance| SC@BOXWD-| margin parwidth|
105
       \advance\SC@BOXWD-\marginparsep
106
107
       \SC@CAPWD\marginparwidth
108
    }%
109 }
110 \DeclareOption{innerbody}{%
     \def\SC@justify@body{%
       \isSC@ODD{\RaggedRight}{\RaggedLeft}}
112
113 }
114
115 \DeclareOption{outerbody}{%
     \def\SC@justify@body{%
116
117
       \isSC@ODD{\RaggedLeft}{\RaggedRight}}
118 }
119
120 \DeclareOption{centerbody}{%
     \def\SC@justify@body{\Centering}
121
122 }
123
124 \DeclareOption{rightbody}{%
     \def\SC@justify@body{\RaggedLeft}%
125
126 }
127
128 \DeclareOption{leftbody}{%
     \def\SC@justify@body{\RaggedRight}%
129
130 }
131 \ExecuteOptions{outercaption}
132 %%\InputIfFileExists{sidecap.cfg}{}} % hier ? % 2002/06/14
133 \ProcessOptions\relax
   \AtBeginDocument{%
     \ifSC@origRagged\else
135
       \@ifpackageloaded{ragged2e}{}%
136
137
         \IfFileExists{ragged2e.sty}{%
138
    \RequirePackage[NewParameters]{ragged2e}}%
139
140
141
           \PackageWarningNoLine{sidecap}{%
142
       Package 'ragged2e' not found -- expect bad formatting}%
```

```
143
                 }%
               }
        144
             \fi
        145
             \@ifundefined{RaggedRight}%
        146
        147
               \let\RaggedLeft\raggedleft
        148
               \let\RaggedRight\raggedright
        149
               \let\Centering\centering
        150
        151
             \@ifpackageloaded{hyperref}%
        152
               {\let\SC@pageref=\hypergetpageref}%
        153
        154
                 \@ifpackageloaded{babel}%
        155
                 {\let\SC@pageref=\org@pageref}%
        156
        157
                 {\let\SC@pageref=\pageref}%
        158
        159 }
               User-level macros (environments)
        5.4
        Simply passes the first (optional) parameter and the required one, in this case
        'figure', to SCOfloat. The figure caption should be bottom aligned.
        161 %\newcommand*\SCfigureVpos{b}% 2002/06/14
        162 \@ifdefinable\SC@figure@vpos{\def\SC@figure@vpos{b}}
        163 \newenvironment{SCfigure}{\SC@float[\SC@figure@vpos]{figure}}{\endSC@float}
        164 \newenvironment{SCfigure*}{\SC@dblfloat[\SC@figure@vpos]{figure}}{\endSC@dblfloat}
        Simply passes the first (optional) parameter and the required one, in this case
SCtable
        'table', to SC@float. The table caption should be top aligned.
        167 %\newcommand*\SCtableVpos{t}% 2002/06/14
        168 \verb|\def| SC@table@vpos{\def| SC@table@vpos{t}}|
        169 \newenvironment{SCtable}{\SC@float[\SC@table@vpos]{table}}{\endSC@float}
        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.
        172 %
        173 \newenvironment{wide}%
        174 {%
             \@parboxrestore% 2002/06/14 -- SW-Arch.: wozu? 2002/08/24
        175
             \advance\linewidth\marginparwidth
        176
             \advance\linewidth\marginparsep
        177
             \ifx\label\SC@label
                       \typeout{WIDE: inside SCfloat}%
        179 (+debug)
               \SC@widetrue
```

```
\else
181
             \typeout{WIDE: outside SCfloat}%
182 (+debug)
      \begin{lrbox}\SC@BOX % \begin necessary: --> \@noitemerr
183
184
         \minipage\linewidth
185
186 }%
187 {%
    \ifx\label\SC@label
188
189 (+debug)
190 \typeout{WIDE: inside SCfloat}%
      %\renewcommand*{\isSC@WIDEi}[2]{\if@twocolumn ##2\else ##1\fi}%
191
      %\renewcommand*{\isSC@WIDEii}[2]{##1}%
192
      %\let\isSC@WIDE\isSC@WIDEi
193
    \else
194
195 (+debug)
196 \typeout{WIDE: outside SCfloat}%
197
        \endminipage
      \end{lrbox}% \end necessary: --> \@noitemerr
198
      \global\advance\c@SC@C\@ne
199
      \SC@orig@label{\SC@IDENT}% nicht \ref... !!!
200
201
      \trivlist \item\relax
      202
203 (+debug)
204 \typeout{WIDE: \string\linewidth=\the\linewidth}%
      206
      \endtrivlist
207
    \fi
208 }
209
```

5.5 Internal macros

5.5.1 Collecting arguments

The new internal float environment, similar/analogous to LATEX's @float environment.

Syntax: $\SC@float[\langle vpos \rangle] \{\langle name \rangle\} [\langle relwidth \rangle] [\langle fps \rangle]$

- Parameter $\langle vpos \rangle$ (optional) is the vertical positioning of the caption.
- Parameter $\langle name \rangle$ (required) is the name of the 'original' LATEX floating environment (e.g., 'figure' or 'table').
- Parameter $\langle relwidth \rangle$ (optional) is the desired relative width of the caption.
- Parameter $\langle fps \rangle$ (optional) is the usual LATEX float positioning specifier.

The usual 'cascading' programming style is applied (cf. LATEX's \Ofloat).

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

 ${\tt 210 \def\SC@float\{\SC@SaveCommands\@ifnextchar[\SC@xfloat\{\SC@xfloat[c]\}\}}$

241 \let\isSC@WIDE\isSC@WIDEi%

```
\SC@xfloat Then the first and second parameters are consumed and the third one is checked
            211 \def\SC@xfloat[#1]#2{\@ifnextchar[%
            212 {\SC@yfloat{#1}{#2}}%
                {\SC@zfloat{#1}{#2}{\sidecaptionrelwidth}[\@nameuse{fps@#2}]}}
 \SC@yfloat Again, the fourth (and last) parameter is checked for.
            214 \def\SC@yfloat#1#2[#3]{\@ifnextchar[%
            215 {\SC@zfloat{#1}{#2}{#3}}%
               {\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.
            217 \def\SC@zfloat#1#2#3[#4]{%
                \def\SC@vpos{#1}%
            219 \expandafter\edef\csname fps@#2\endcsname{#4}%
            220 \def\SC@captype{#2}%
            The \caption and \label commands must be redefined.
                \let\SC@CAPtext\@empty \let\SC@DTCAPtext\@empty \let\SC@LABtext\@empty%
                \renewcommand\caption[2][]{\gdef\SC@OPTCAPtext{##1}%
            224
                \gdef\SC@CAPtext{##2}\ignorespaces}% \SC@justify
            225
                \let\label=\SC@label
            Save the figure or table (or whatever) in a box.
                \SC@widefalse
                \begin{lrbox}\SC@BOX % \begin necessary: --> \@noitemerr
                %%% \strut
            229
            230 }%
            231
\SC@dblfloat Analogous to LATEX's \@dblfloat.
            232 \def\SC@dblfloat{%
            233 \SC@SaveCommands%
            234 \if@twocolumn\let\reserved@a\SC@dbflt\else\let\reserved@a\SC@float\fi
            235 \reserved@a}
            236 \ensuremath{\texttt{SC@dbflt{SC@float}}}
            5.5.3 Output the float's contents
\endSC@float Outputs the figure or table (or whatever) and the caption.
            237 \def\endSC@float{%
            238 %%%\strut
            239 \end{lrbox}% \end necessary: --> \Onoitemerr
            240 (+debug) \typeout{onecolumn}%
```

```
\def\@FLOAT{\@float}\def\end@FLOAT{\end@float}%
                 242
                      \isSC@WIDE%
                 243
                         {\@tempdima\textwidth % \columnwidth ???
                 244
                 245
                          \advance\@tempdima\marginparwidth
                          \advance\@tempdima\marginparsep}%
                 246
                         {\@tempdima\columnwidth}%
                 247
                 248 \langle +debug \rangle \ \typeout{endSC@float: \string\\@tempdima=\the\\@tempdima}%
                      \endSC@FLOAT\@tempdima}%
\endSC@dblfloat Ditto for *-forms of floats.
                 250 \def\endSC@dblfloat{%
                      \end{lrbox}% \end necessary: --> \@noitemerr
                 253
                      \let\isSC@WIDE\isSC@WIDEii%
                      \label{loss} $$ \end{\mathbb{LOAT}}\end{\mathbb{LOAT}}\end{\mathbb{Loat}}% $$ $$ \end{\mathbb{Loat}} % $$ \end{\mathbb{Loat}} $$
                 254
                      \isSC@WIDE%
                 255
                         {\@tempdima\textwidth%
                 256
                 257
                          \advance\@tempdima\marginparwidth
                          \advance\@tempdima\marginparsep}%
                 258
                         {\@tempdima\textwidth}%
                 259
                 260 (+debug)
                 261 \typeout{endSC@dblfloat: \string\@tempdima=\the\@tempdima}%
                      \endSC@FLOAT\@tempdima}%
   \endSC@FLOAT Sets the caption width. If caption width plus figure/table width (plus separation
                  space) is too large then the caption width is set equal to the remaining width.
                 263 \def\endSC@FLOAT#1{%
                     \SC@calcwidths{#1}%
        \@FLOAT Calls the LATEX float command with the two minipages inside a main minipage.
                      \@FLOAT{\SC@captype}%
                 265
                 266
                         \abovecaptionskip\z@skip
                 267
                        \belowcaptionskip\z@skip
                  Creates a label for each figure or table (etc.) for later determination if the page is
                  odd or even. The counter SCQC must be incremented before.
                 268
                         \global\advance\c@SC@C\@ne
                 269
                         \SC@orig@label{\SC@IDENT}% nicht \ref... !!!
     \isSC@WIDE
                        \isSC@WIDE%
                 270
                           {\ifdim\SC@tempdimb>\textwidth % ???
                 271
                              272
                 273
                            \else%
                              \def\SC@hpos{c}%
                 274
                            \fi
                 275
                 276
                            \@tempdimc\textwidth}% ???
                           \label{lem:condition} $$ {\ensuremath{\tt CC0tempdima\def\SC0hpos\{c\}}} % $$
                 277
```

278 \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.

```
\SC@FLOAT%
279
            {\minipage[\SC@vpos]{\SC@CAPWD}%
280
               %% \nointerlineskip %\offinterlineskip%
281
               %% \kern0pt\relax
282
               \hrule \@height\z@\@depth\z@ %%% Testen, Doku. (Implementierung) !!!
283
              %\show\SC@justify@caption
284
                  \tracingall\tracingonline=0
285 %%%
      \SC@justify
286
      \let\@arrayparboxrestore\relax % sonst Blocksatz! (\@parboxrestore)
287
      \let\usecaptionmargin\relax % sonst Pseudo-Blocksatz, nicht-alternierend!
288
289 %
        \isSC@ODD {\RaggedRight }{\RaggedLeft }
290 %%%
          ABC
291 %
       \isSC@ODD{\typeout{xxxxx ungerade}}{\typeout{xxxxx gerade}}%
292 %
       \def\@makecaption##1##2{##1: ##2\endgraf}%
293 % \@parboxrestore
294 % \@setminipage
295 \iffalse
296 % DEBUG:
297
             \endgraf
             \@makecaption{\csname fnum@\SC@captype\endcsname}%
298
                  {\ignorespaces \SC@CAPtext}%
299
             \endgraf
300
301 \else
302
             % \ifthenelse{\equal{\SC@OPTCAPtext}{\@empty}}%
              \ifx\SC@OPTCAPtext\@empty% Noetig?
304 % FM: strut needed twice for multiline captions
305
                 \SC@orig@caption[\SC@CAPtext]%
                      {\tt \{\strut\ignorespaces\SC@CAPtext\unskip\strut\}\%\ \expandafter\protect}
306
               \else
307
308 % FM: strut needed twice for multiline captions
309\ \% FM: if \SC@CAPtext can contain trailing banks then we also need \unskip
310 % FM: (not checked)
                 \SC@orig@caption[\SC@OPTCAPtext]% \expandafter\protect
311
                      {\strut\ignorespaces\SC@CAPtext\unskip\strut}% \expandafter\protect
312
               \fi
313
               \unskip% ??? Dok. !!!
314
315
               \ifx\SC@LABtext\@empty\else
316
                 \SC@orig@label{\SC@LABtext}\fi% \expandafter\protect
317 \fi
          X Y Z
318 %%%
               \hrule \@height\z@\@depth\z@
319
             \endminipage}%
320
           {\minipage[\SC@vpos]{\SC@BOXWD}%
321
               %% \nointerlineskip %\offinterlineskip%
322
```

Index 11

```
323
               %% \kernOpt\relax
               \hrule \@height\z@\@depth\z@
324
               \SC@justify@body
325
               \unhbox\SC@BOX % \strut \unhbox/\usebox{\SC@BOX}% TESTEN!
326
327
               % \kernOpt\relax
               \hrule \@height\z@\@depth\z@
328
             \endminipage}%
329
       }%
330
     \end@FLOAT%
331
332 }
333 \InputIfFileExists{sidecap.cfg}{}} % hier ? % 2002/06/14
334 (/package)
```

Index

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

```
\subiteghteehalbouecapti\satkiipen, raikhiteapti\sathitent *+\gdef+, 12, 223, 224
                                                                                            \subitem *+\advance+, 3\sub\stems5\vi36\tau, 1\sub\stems106, 17\sub\startem 1\tau\startem 1\tau\star
                                               246, 257, 258, 268
                                                                                                                                                                \subirten=*+\AtBagaitTorcumtercuef+13416; 219 \subitem *+\hrule+, 283, 319, 324
AtBeginDocument=
                                                                                                                                                                                                                                                                 \subitem *+\else+\hspace4, 60, subzitems*, \hspace4, 6694.722278
                                                                                                                                                                                                else=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \subitem *+\hypergetpag
                                                                                                                                                                                                                                                                                                                                                                                             hypergetpageref=
                                                                            \subitem *+\begin+, 18301228 307,
                                                                                                                                                                                                                                                                                                                                                          315
                                                                                                                                                    \subitehlften\text{belowc}spubiotenkiqb=1,fD63t+, 254
fwocolumn=
FLOAT= \subitem FLOAT+, 242, 254, 331
twocolumn=
functions functions for two sides and two sides are two 
belowcaptionskip=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    subitem twocolumn+, 87, 19
                                                                                        \subitem *+\captain+, b4sumer |
\subitem *+\captainmed+, b4subitem *+\captainmed+, b4subitem *+\captainmed+, b4subitem *+\landsammed+, b4subitem *+\landsammed+, b4subitem *+\landsammed+, b4subitem *+\landsammed+, b4subitem \text{original} \text{captainmed} \text{capta
caption=
Centering=
centering=
columnwidth=
copy=
                                                                        \subitem *+\copyend205nipage=
csname=
DeclareOption=
                                                           15, 120, 124, 128 endtrivlist= \subitem *+\endtrivlist+, 20 \subitem *+\def+, 22;ir2\subitem *+\def+, 23;ir2\subitem *+\def+, 24;ir2\subitem *+\def+, 25;ir2\subitem *+\def+, 
                                                115, 120, 124, 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             subitem *+\ignorespaces+,
121,125,
\subitem *+\InputIfFil
def =
                                                129, 162,
                                                                                                                             168.
                                                                                                                                                                                                                                               160
                                                                                                                                                                                               environments:¿SCtable=SCtable.
First=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \star \star \star \star \star 59
                                              202,
                                                                                     210,
                                                                                                                             211,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \subitem First+, 46
                                                                                                                             218,
                                              214,
                                                                                     217,
                                                                                                                                                                                                                                               <u>166</u>
                                                                                                                                                                                                                                                                                                                                                                                                   ODD =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \subitem ODD+, 58, 61, 65, 67, 7
                                              220,
                                                                                                                              232,
                                                                                     221.
                                                                                                                                                                                                environments:¿wide=wide,
                                                                                                                                                                                                                                                                                                                                                                                                   WIDE =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \subitem WIDE+, 193, 241, 243,
                                              236,
                                                                                     237,
                                                                                                                              242,
                                                                                                                                                                                                                                               172
                                                                                                                                                                                                                                                                                                                                                                                                     WIDEi=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \subitem WIDEi+, 41, 43, 87, 19
                                                                                                                                                                                                                                                                             \subitem *+\equal+\frac{7}{2}
                                              250,
                                                                                   254,
                                                                                                                             263,
                                                                                                                        200, equal= \subitem *+\equal+ 302 \\ \text{VIDEn} = \subitem \text{WIDEn} + 42, 44, 88, \\ 277, 292 \text{ExecuteOptions} \subitem *+\text{ExecuteDptions} + 131 \\ \subitem \text{item} = \subitem *+\text{ExecuteDptions} + 201 \\ \subitem \text{item} + \text{219, 306, 311, 312, 316} \\ \text{Subitem} \text{item} + \text{219, 306, 311, 312, 316} \\ \text{Subitem} \text{301, 312, 316} \\ \text{Subitem} \text{301, 312, 316} \\ \text{Subitem} \text{301, 312, 316} \\ \text{301, 312, 312, 316} \\ \text{301, 312, 312, 316} \\ \text{301
                                                                                                                                                                                                equal=
                                              272, 274, 277, 292
innercaption=
leftcaption=
                                                                                                             \subitem leftcaption+, 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \subitem *+\kern+, 282, 323, 327
                                                                                                                                                                                                                                                                                                                                                                                                kern =
outerbody=
                                                                                                           \subitem outerbody\sub&tem *+\fi+, 37, 43, 44, 62, 87, 145, 185, 191, 207, 221,
outercaption=
                                                                                                                          \subitem outercapt3.on+,396,
                                                                                                                                                                                                                                                                                                                                                         317 label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \subitem *+\label+, 54, 178, 188,
```

Index 12

```
\subitem *+\let+, 22f=23, \sub\94\em99+\101+, 136\fte126=355igu156, 157, 193,
let=
                          222, 225, 234,
                                                                                                                                                   \subitem *+\relax+, 28(en03rpnnn33nt)2011,60282, 287, 288, 323,
                                                                                                          relax =
                          241, 253, 287, 288
                                                                                                                                                                                          \subiten Chrymeneprosumand \sub4 ten6 *+ \SCflgures pos3
                                                                                                         renewcommand=
                                                        \subitem *+\RequiredPhrkad76, 17\sub84es204\heq66tablekage+, 3, 139
linewidth=
                                                                                                                                                                                                                                                  vironment),
                                                                                                                                                                                                                                                                                                              166
                                                                                                                                       \subitem a+, 234, 235
                                                       makebox=
                                                                                                                                                                                                                       SCtableVpos=
                                                                                                                                                                                                                                                                                             \subitem *+\SCtableVpos+,
marginparsep=
                                                                       \subitem Be\marginpasseptem 150x4,061cc,1656c)c246s, 2568\su228t,ens26+\setboolean+, 52,
marginparwidth=
                                                                                 \subitem *+\mboxtalc 226ths=
mbox =
                                                                                                                                                                        \subitem cabin apprewidth: 264\subitem *+\sidecapt
                                                       \subitem *+\minipage \substanta 184\substanta 24APtickteqptionsep24, 29squbitem 306\sistem aptionse
minipage=
                                                                                                                                                              \subitem captypdegal2201v265= 298 \subitem *+\sidecaption
                                                                                                            captype=
newboolean=
                                                                 \subitem *t\Armonglean+\subitem CAP\muripes, 30,\subitem 36\string280204, 248, 2\subitem 46\string280204, 248, 2\subitem 46\string280204, 248, 2\subitem 46\string280204, 248, 2
newcommand=
                                                          61, 167 dblfloat= \subitem dblfloat+, 164, 170, \main{232} \subitem *+\reverset \subitem \text{FLOATExtyddt} \overset \o
newcounter=
newdimen=
newenvironment=
                                                     newsavebox=
noindent=
nointerlineskip=
                                                 \subitem *+\number+ 11 \subitem justify+, 48, 90, 92, 94, 224, 200
\subitem *+\number+ 11 \subitem label+, 12, 178, 188, 225
\subitem *+\outlines 1 \subitem label+, 12, 178, 188, 225
\subitem set of time 1 \subitem label+, 12, 178, 188, 225
\subitem set of time 1 \subitem label+, 12, 178, 188, 225
\subitem set of time 2 \subitem subitem set of time 2 \subitem set of time 3 \subitem set of time 4 \subitem set of tim 4 \subitem set of time 4 \subitem set of time 4 \subitem set of
number =
offinterlineskip=
pageref=
PackageWarningNoLine=
                                                                                                                                                                       \subitem tempdima+, 8,\28,34, 36,\value+,
                                                 \subitem *+\pagerer imas 7
                                                                              \subitemerp(\frac{\text{processOption}}{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\frac{\text{tem}_1\t
ProcessOptions=
                                                 \subitem *+\proveet+, 30\subitem 3120,5+316\d= 280\s32\tem *+\wd+, 29
protect=
                                                                                                            widefalse=
                                                                                                                                                                   \subitem widefalsetid22, 227(envi-
{\bf RaggedLeft}{=}
                                                                 \subitem **\ReggedLeft+,\s&DitTem, \d4det921e+1,123614730,125, 1482 289
                                                           \subitem *+\xaggedleft\sub48em xfloat+, 210, \main{211}
raggedleft=
                                                                     \subitem *flondaggedRichubritenty.yf/40,at/4, 202\s\hatatah(24,4)228, 1349, 2324, 328
RaggedRight=
                                                                 \subitem *+Xhranggedrighstrhittet® zfloat+ski@±3, 21\5sub2itt6em \snkainn+{212766, 267
raggedright=
```