Package hvfloat
Rotating objects and captions
ver 1.2b

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This hvfloat.sty defines a macro to place objects and captions of floats in
different positions with different rotating angles.
All objects and captions are framed, which is only for demonstration here and
has no additional sense.

Figure 1: What a nice Caption :-)

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1 The Package Options

\fbox The objects and captions are put into a \fbox command, like in this documentation. This doesn’t make real sense and is only for some demonstration useful. The length \belowcaptionskip is set by \LaTeX to 0pt and changed in hvfloat to the same value than \abovecaptionskip. This length can be changed to another value in the usual way with \setlength or \addtolength.

2 The Macros

The syntax for the \hvFloat macro is

\hvFloat[<options>]%  
{<float type>}%  
{<floating object>}%  
[<short caption>]{<long caption>}%  
{<label>}

If the second parameter \texttt{<float type>} is empty, then hvfloat switches by default to a nonfloat (see table 2) object, which is not important for the user. All other parameters may also be empty and the short caption as second optional parameter missing. This one is as usual the caption for the listoffigures.

There are some more macros defined, more or less for internally use in hvfloat, but they can be used for own purposes.

\figcaption[<short caption text>]{<caption text>}  
\tabcaption[<short caption text>]{<caption text>}

They are used for the nonfloat option, where these macros write captions in the same way but outside of a float environment. The default caption cannot be used here. It is no problem to use the \tabcaption command to place a caption anywhere, like here in an inlined mode:

\begin{table}[h]
\centering
\begin{tabular}{|c|}
\hline
\textbf{Table 1: A Caption without any sense and any object} \\
\hline
\end{tabular}
\end{table}

A label can be put inside the argument or after the command in the usual way, so that a reference to the not existing table 1 is no problem.

[...] It is no problem to use the \verb|\tabcaption| command to place a caption anywhere, like here in an inlined mode:\
\begin{table}[h]
\centering
\begin{tabular}{|c|}
\hline
\textbf{Table 1: A Caption without any sense and any object} \\
\hline
\end{tabular}
\end{table}  
\label{dummy}  
A label can be put inside the argument or after the command in the usual way, so that a reference to the not existing table \ref{dummy} is no problem.
2.1 The Options

There are following options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>floatPos</td>
<td>htb</td>
<td>This is the same placement option like the one from the floats.</td>
</tr>
<tr>
<td>rotAngle</td>
<td>0</td>
<td>The value for the angle if both, the object and the caption should be rotated in the same way.</td>
</tr>
<tr>
<td>capWidth</td>
<td>0.8</td>
<td>The width of the caption. Can be &quot;w&quot; for the width of the object or &quot;h&quot; for the height of the object or a scale for \textwidth.</td>
</tr>
<tr>
<td>capAngle</td>
<td>0</td>
<td>The value for the angle if the caption should be rotated. Counted anti clockwise.</td>
</tr>
<tr>
<td>capPos</td>
<td>b</td>
<td>The position of the caption relative to the object. Possible values are (l)eft</td>
</tr>
<tr>
<td>capVPos</td>
<td>c</td>
<td>This is only important for capPos=l</td>
</tr>
<tr>
<td>objectPos</td>
<td>c</td>
<td>The horizontal placement of the object relative to the document. Possible values are (l)eft</td>
</tr>
<tr>
<td>objectAngle</td>
<td>0</td>
<td>The value for the angle if the object should be rotated. Counted anti clockwise.</td>
</tr>
<tr>
<td>floatCapSep</td>
<td>5</td>
<td>The additional width between the object and a left or right placed caption. The default unit is \text{pt}.</td>
</tr>
<tr>
<td>useOBox</td>
<td>false</td>
<td>Instead of passing the object as parameter to the \texttt{hvFloat}, the contents maybe saved in the box \texttt{hvOBox} With useOBox=true the contents of this box will be used.</td>
</tr>
<tr>
<td>nonFloat</td>
<td>false</td>
<td>The object isn’t put in a floating environment. It is printed as standard text with an additional caption. The float counters are increased as usual and can be referenced.</td>
</tr>
</tbody>
</table>

3 The Default Use of Floating Environments

In this case there is no essential difference to the well known \texttt{figure} or \texttt{table} environment, f.ex.:

\begin{figure}
... object ...
\caption{...}% caption below the object
\end{figure}

Code for figure 2:
Figure 2: Without any Options (only the \texttt{fbox} package option)

1. \texttt{hvFloat\{figure\}\{\includegraphics{rose}\}}{Without any Options (only the \texttt{fbox} package option)}{fig:0}

Figure 3: With the only Option \texttt{capPos=t} to place the caption on top of the table, which is often the default

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>\texttt{hvFloat}</td>
<td>command</td>
<td>places object and caption in different ways</td>
</tr>
<tr>
<td>\texttt{hvFloatEnv}</td>
<td>environment</td>
<td>places object and caption exactly Here</td>
</tr>
<tr>
<td>\texttt{figcaption}</td>
<td>command</td>
<td>writes a figure caption in a non floating environment</td>
</tr>
<tr>
<td>\texttt{tabcaption}</td>
<td>command</td>
<td>writes a table caption in a non floating environment</td>
</tr>
<tr>
<td>\texttt{setDefaults}</td>
<td>command</td>
<td>sets all options to the defaults</td>
</tr>
</tbody>
</table>

Code for table 3:

1. \texttt{hvFloat\{capPos=t\}\{figure\}\{}%
2. \begin{tabularx}{\textwidth}{|l|l|X}
3. Name & Type & Description
4. \hline
5. \texttt{hvFloat} & command & places object and caption in different ways\%
6. \texttt{hvFloatEnv} & environment & places object and caption exactly Here\%
7. \texttt{figcaption} & command & writes a figure caption in a non floating environment\%
8. \texttt{tabcaption} & command & writes a table caption in a non floating environment\%
9. \texttt{setDefaults} & command & sets all options to the defaults\%
10. \end{tabularx}\%

\{With the only Option \texttt{capPos=t} to place the caption on top of the table, which is often the default\}

See section 9 for some more informations about tabulars as objects.

4 Caption Right or Left

Code for figure 4:
1. \texttt{hvFloat}\%

6
4.1 Caption Right and Rotated

Code for figure 5:

```latex
\hvFloat[%
  floatPos=htb,%
  capWidth=h, % of columnwidth
  capPos=r,%
  capAngle=90,%
  capVPos=c,%
  objectPos=c]{figure}{\includegraphics{rose}}%
  [Centered Caption beside Object]{
  Caption vertically centered right beside the float with a caption width of \texttt{0.5\textbackslash columnwidth} and \texttt{floatcapsep=5pt} (the default)}{fig :2}
It is no problem to rotate the object, too. But with a different angle value than for the caption. Do not ask for the sense, it is only a demonstration of what is possible ... The object (image) is rotated by \(-30\) degrees with the `rotatebox` makro.

![Image of rotated object]

Code for figure 6:

```latex
\ HVFloat[
  floatPos=htb,%
  capWidth=h,
  capPos=r,%
  capAngle=180,%
  objectAngle=-30,%
  capVPos=c,%
  objectPos=c]{figure}{\fbox{\includegraphics{rose}}}%

[Centered Caption beside Object]{
  Caption vertically centered right beside the float with a caption width of the height of the image and \texttt{floatcapsep=5pt} (the default)}{fig:3}
```

5 Vertical Position of the Caption

The caption can be placed beside the object in the positions (c)enter|(b)ottom|(t)op

The code for figure 7:

```latex
\ HVFloat[
  floatPos=htb,%
  capWidth=0.25,%
  capPos=r,%
  capVPos=b,%
][{figure}{\includegraphics{rose}}]{Caption at bottom right beside the float}{fig:4}
```

The code for figure 8:
The code for figure 9:

```latex
\hvfloat[
floatPos=htb,
capWidth=0.25, 
capPos=r, 
capVPos=t, 
]{figure}{\includegraphics{rose}}{Caption at top left beside the float}{fig:5}
```

The code for figure 9:

```latex
\hvfloat[
capWidth=0.25, 
capPos=r, 
capVPos=c, % the default
]{figure}{\includegraphics{rose}}{Caption centered right beside the float}{fig:5}
```
6 Horizontal Position of the Float

The code for figure 10:

```latex
\hfloat[
  capWidth=0.25,%
  capPos=r,%
  capVPos=t,%
  objectPos=l,%
]{figure}{\includegraphics{rose}}{Caption at top right beside the float and object position left}{fig:6}
```

The code for figure 11:

```latex
\hfloat[
  capWidth=0.25,%
  capPos=l,%
  capVPos=t,%
  objectPos=r,%
]{figure}{\includegraphics{rose}}{Caption at top left beside the float and object position right}{fig:7}
```
7 Full Page Width in Landscape Mode

If you do not want to load the \texttt{lscape} package you can use the floatPos=p option to put the image on an own page and rotated by 90 degrees (figure 12).

Code for figure 12:

\begin{verbatim}
\hvFloat[
  floatPos=p,%
  capWidth=1,%
  capPos=b,%
  rotAngle=90,%
  objectPos=c%
]{figure}{\includegraphics[width=0.9\textwidth]{bateaux}}{%
  Caption at top right beside the float and object position right}{fig:9}
\end{verbatim}

The float can also be put to the left or to the right (above/below in landscape) with the objectPos=l parameter

The code for figure 13:

\begin{verbatim}
\hvFloat[
  floatPos=p,%
  capWidth=h,%
  capPos=r,%
  objectAngle=90,%
  capAngle=-90,%
  objectPos=l%
]{figure}{\includegraphics[width=\textwidth]{bateaux}}{%
  Caption right beside the float and object position left. The caption rotated by $-90$ degrees}{fig:10}
\end{verbatim}

8 The nonfloat Option

Sometimes it is better to put a “float” in a specific position of the page. This is possible with the nonfloat package and the option nonFloat=true.

\begin{verbatim}
\hvFloat[
  nonFloat=true,%
  capWidth=0.25,%
  capPos=r,%
  capVPos=b,%
  objectPos=c,%
]{figure}{\includegraphics{rose}}{%
  Caption of a "nonfloat" Object, using the \texttt{nonfloat} Package}{fig:11}
\end{verbatim}
The image 14 is exactly placed where the hvFloat command appears. There are only commands for figure and table environments:

1. \newcommand{\figcaption}{\def@captype{figure}\caption}
2. \newcommand{\tabcaption}{\def@captype{table}\caption}

But it is no problem to define more \texttt{xcaption} commands to support other with the float package defined new floats.

9 Tables as Objects

The object has to be passed as an parameter to the \texttt{hvFloat} macro. This is no problem with images but maybe with tables, so it is easier to use the box \texttt{hvOBox} to save the table in this box and pass it then to \texttt{hvFloat} with the \texttt{useOBox} option. For example see table 3 and 4:

The code for table 3 and 4 is:

In this case leave the third parameter empty.
<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>hvFloat</td>
<td>command</td>
<td>places object and caption in different ways</td>
</tr>
<tr>
<td>hvFloatEnv</td>
<td>environment</td>
<td>places object and caption exactly Here</td>
</tr>
<tr>
<td>figcaption</td>
<td>command</td>
<td>writes a figure caption in a non floating environment</td>
</tr>
<tr>
<td>tabcaption</td>
<td>command</td>
<td>writes a table caption in a non floating environment</td>
</tr>
<tr>
<td>setDefaults</td>
<td>command</td>
<td>sets all options to the defaults</td>
</tr>
</tbody>
</table>

Table 3: Demonstration of the use0Box Parameter
10 Text and Objects

With the onlyText option it is no problem to put some text beside an image without getting the caption titles figure/table. The object still can be a floating one or a nonfloating if the nonfloat is used.

Demonstration of the onlyText Parameter, which makes it possible to put some text beside a floating object without getting a starting Figure: or Table:

The code for figure 10:

```latex
\begin{hvFloat}
  \onlyText=true,\
  \capAngle=90,\
  \capPos=r,\
  \capVPos=t,\
  \capWidth=h\}
\includegraphics{rose}
\end{hvFloat}

\texttt{onlyText} Caption

Demonstration of the \texttt{onlyText} Parameter, which makes it possible to put some text beside a floating object without getting a starting Figure: or Table:

11 Environment hvFloatEnv

With the environment hvFloat one can place an object exactly on that position where the environment is defined. For captions the use of \captionof is recommended:

<table>
<thead>
<tr>
<th>left</th>
<th>center</th>
<th>right</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>C</td>
<td>R</td>
</tr>
</tbody>
</table>

The environment has an optional argument for setting the line width which is preset to textwidth. The object is always centered.
Table 6: A caption for a nice table

<table>
<thead>
<tr>
<th>left</th>
<th>center</th>
<th>right</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>C</td>
<td>R</td>
</tr>
</tbody>
</table>

\begin{hvFloatEnv}[0.5\textwidth]
\captionof{table}{A caption for a nice table}
\begin{tabular}{@{} l c r @{}}
\hline
left & center & right \\
L & C & R \\
\hline
\end{tabular}
\end{hvFloatEnv}

12 Global float setting

Instead of writing the following sequence into the preamble:

\makeatletter
\renewcommand\fps@figure{tb}
\renewcommand\fps@table{t}
\makeatother

you can change the global setting of floats by loading the package hvfloat-fps. It allows optional package options to set the global placement:

\usepackage[figure=tb,table=t]{hvfloat-fps}

13 The Package Source

\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{hvfloat}[2017/01/28 rotating of floating objects]
\% IMPORTANT NOTICE:
\%
\% This is file `hvfloat.sty',
\%
\% Herbert Voss <hvoss@tug.de>
\%
\% This program can be redistributed and/or modified under the terms
\% of the LaTeX Project Public License Distributed from CTAN archives
\% in directory macros/latex/base/lppl.txt.
\%
\% DESCRIPTION:
\%
\% `hvfloat' offers rotating of captions and objects for floats
\%
\def\fileversion{1.2b}
\def\filedate{2017/12/22}
\message{`hvfloat' \\fileversion, \filedate space (Herbert Voss)}
% \newif\ifhv@fbox \hv@fboxfalse
\DeclareOption{fbox}{\hv@fboxtrue\setlength{fboxsep}{1pt}}
\ProcessOptions
% \RequirePackage{graphicx}
\RequirePackage{keyval}
\RequirePackage{caption}
% \newlength{hvObjectWidth}
\newlength{hvCapWidth}
\newlength{hvMaxCapWidth}
\newsavebox{hvObjectBox}
\newsavebox{hvCaptionBox}
\newsavebox{hvOBox}
% \newif\ifhv@useOBox
\newif\ifhv@nonFloat
\newif\ifhv@onlyText
\def\hv@figure{figure}
% \def\hvSet@boolkey#1#2{\csname hv@#2\ifx\relax#1\relax true\else#1\fi\endcsname}
\define@key{hvSet}{floatPos}[htbp]{LaTeX's position parameters htbp}
\def\hvSet@floatPos{#1}
\define@key{hvSet}{rotAngle}[0]{rotates caption AND image together}
\def\hvSet@rotAngle{#1}
\define@key{hvSet}{capWidth}[,8]{object (w)idth|object (h)eight|<scale of columnwidth>}
\def\hvSet@capWidth{#1}
\define@key{hvSet}{capAngle}[0]{-360..+360}
\def\hvSet@capAngle{#1}
\define@key{hvSet}{capPos}[b]{(l)eft|(b)ottom|(t)op|(r)ight it is relativ to the object}
\def\hvSet@capPos{#1}
\define@key{hvSet}{capVPos}[c]{(b)ottom|(c)enter|(t)op it is relativ to the object}
\def\hvSet@capVPos{#1}
\define@key{hvSet}{objectPos}[c]{(l)eft|(c)enter|(r)ight it is relativ to the document}
\def\hvSet@objectPos{#1}
\define@key{hvSet}{objectAngle}[0]{-360..+360}
\def\hvSet@objectAngle{#1}
\define@key{hvSet}{floatCapSep}[5]{a width with the unit pt}
\def\hvSet@floatCapSep{#1}
\define@key{hvSet}{useOBox}[false]{use of the hvOBox contents}
\lowercase{hvSet\{boolkey[#1]\}}{useOBox}\%
\define@key{hvSet}{nonFloat}[false]{% Do not use float environment
\lowercase{hvSet\{boolkey[#1]\}}{nonFloat}\%
\define@key{hvSet}{onlyText}[false]{% Write the caption only as text
\lowercase{hvSet\{boolkey[#1]\}}{onlyText}\%
}
\newcommand{\setDefaults}{%
\setkeys{hvSet}{
floatPos=htbp, rotAngle=0, capWidth=.8, capAngle=0,
capPos=b, capVPos=c, objectPos=c, objectAngle=0,
floatCapSep=5, useOBox=false, nonFloat=false,
onlyText=false}
}
\newcommand{\figcaption}[2][\@captype{figure}]{% ifx\relax#1\relax \caption[#2]{#1}\else\caption[#1][#2]\fi}
\newcommand{\tabcaption}[2][\@captype{table}]{% ifx\relax#1\relax \caption[#2]{#1}\else\caption[#1][#2]\fi}
\def\hvFloat\{\@ifnextchar[\{}\do@hvFloat}{\do@hvFloat[\}]
\def\do@hvFloat[#1]{% setDefaults
\setkeys{hvSet}{#1}
\ifx\relax#1\relax \setkeys{hvSet}{nonFloat=true}\else\setkeys{hvSet}{nonFloat=false}\fi
\gdef\hv@floatType{#1}
\@ifnextchar[]{\do@@hvFloat}{\do@@hvFloat[]}% 
\def\do@@hvFloat[#1]{% #2#3{% \def\hv@shortCap{#1} \def\hv@longCap{#2} \def\hv@label{#3}% %\newcommand*{\hvFloat}[5]{% [%1]: keyvalues % #2: type figure | table | ... % #3: float contents % #4: short caption % #5: caption % #6: label % \setDefaults% % \def[@tempa#1]{% % \ifx[@tempa\empty% set options, only when not empty % \def[@tempa{90}% % \ifx\hvSet@rotAngle[@tempa% setlength{\hvMaxCapWidth}{\textwidth}% \else% \setlength{\hvMaxCapWidth}{\linewidth}% \fi % % First we save the object in \hvObjectBox % % \ifx\hvSet@objectAngle\hv@Zero% rotate the object? % \savebox{\hvObjectBox}{% % usebox{\hvOBox} % \else% \hv@floatObject% % \fi% % \setlength{\hvObjectWidth}{wd\hvObjectBox}% % % Now we save the caption with its defined \hvCapWidth % % \ifx\hvSet@capWidth\hv@Width% setlength{\hvCapWidth}{\hvObjectWidth}% % \else% \setlength{\hvCapWidth}{\ht\hvObjectBox}% % \else% \setlength{\hvCapWidth}{\hvObjectWidth}% % \ifx\hvSet@capPos\hv@Left% addtolength{\hvMaxCapWidth}{-\hvObjectWidth}% % \else% addtolength{\hvMaxCapWidth}{-\hvObjectWidth}% % \ifdim\hvSet@capWidth<\hvMaxCapWidth% setlength{\hvCapWidth}{\hvSet@capWidth\columnwidth}% % \else% setlength{\hvCapWidth}{\hvMaxCapWidth}% % \fi% \fi% % % now we have the object and the caption with the right % rotated angles saved in boxes % % \fps@figure{\hvSet@floatPos}% \ifhv@nonFloat% % Start the nonfloat part
\else \begin{hv@floatType}\% Start the floating environment
\fi
\saveCaptionSkip% we put this space ourselves
\ifx hvSet@capAngle hv@Width \% need rotation?
\sbox{hvCaptionBox}{\% begin(minipage)[b]{hvCapWidth}\% minipage, to get hyphenation
\ifhv@nonFloat
\else
\ifx hv@floatType hv@figure
\ifx relax\relax \figcaption[#2]\else \figcaption[#1]{#2}\fi
\else
\figcaption[#1]{#2}\fi
\fi
\fi
\else
\expandafter\% expandafter\relax hv@shortCap \relax \caption[#2]\else \caption[#1]{#2}\fi
\fi
\label{#3}\%
\end{minipage}\%}
\else
\sbox{hvCaptionBox}{\% rotatebox{hvSet@capAngle}{\% begin(minipage)[b]{hvCapWidth}\% minipage, to get hyphenation
\ifhv@nonFloat
\else
\ifx hv@floatType hv@figure
\ifx relax\relax \figcaption[#2]\else \figcaption[#1]{#2}\fi
\else
\figcaption[#1]{#2}\fi
\fi
\fi
\else
\expandafter\% expandafter\relax hv@shortCap \relax \caption[#2]\else \caption[#1]{#2}\fi
\fi
\label{#3}\%
\end{minipage}\%
\else
\restoreCaptionSkip% save old values
\ifx hvSet@objectPos hv@Right \raggedleft\%
\else
\ifx hvSet@objectPos hv@Center
\ifhv@nonFloat\hspace*{fill}\else centering\fi
\fi
\fi
\% to rotate object and caption together, we save all in another box
\fi
\fi
\fi
\fi
\fi
\%
% the caption comes first, if its on the left or the top

\savebox{\@tempboxa}{%
\ifx\hvSet@capPos\hv@Left % caption on left side
  \parbox{\wd\hvCaptionBox}{\usebox{\hvCaptionBox}}%
\else
  \parbox{\wd\hvCaptionBox}{\usebox{\hvCaptionBox}}%
\fi
\hspace{\hvSet@floatCapSep pt} % capfloatsep
\ifhv@fbox
  fbox{\parbox{\wd\hvObjectBox}{\usebox{\hvObjectBox}}}%
\else
  \parbox{\wd\hvObjectBox}{\usebox{\hvObjectBox}}%
\fi
\else
  \ifx\hvSet@capVPos\hv@Top % caption at top
    \raisebox{-height}{\usebox{\hvCaptionBox}}%
  \else
    \raisebox{-height}{\usebox{\hvObjectBox}}%
  \fi
\hspace{\hvSet@floatCapSep pt} % capfloatsep
\ifhv@fbox
  fbox{\parbox{\wd\hvObjectBox}{\usebox{\hvObjectBox}}}%
\else
  \parbox{\wd\hvObjectBox}{\usebox{\hvObjectBox}}%
\fi
\else % caption on bottom
  \ifhv@fbox
    fbox{\usebox{\hvCaptionBox}}%
  \else\usebox{\hvCaptionBox}%
  \fi
\hspace{\hvSet@floatCapSep pt} % capfloatsep
\ifhv@fbox
  fbox{\usebox{\hvObjectBox}}%
\else\usebox{\hvObjectBox}%
\fi
\else % if
  \ifdim\wd\hvCaptionBox>\wd\hvObjectBox
    \begin{minipage}{\wd\hvCaptionBox} %
    \else
      \begin{minipage}{\wd\hvObjectBox} %
      \fi
    \centering
  \ifhv@fbox
    \fbox{\usebox{\hvCaptionBox}}\\[\hvBelowCaptionSkip]\fbox{\usebox{\hvObjectBox}}%
  \else
    \usebox{\hvCaptionBox}\[\hvBelowCaptionSkip]\usebox{\hvObjectBox}%
  \fi
  \end{minipage} %
  \else %
    \ifdim\wd\hvCaptionBox>\wd\hvObjectBox
      \begin{minipage}{\wd\hvCaptionBox} %
      \else
        \begin{minipage}{\wd\hvObjectBox} %
        \fi
      \centering
    \ifhv@fbox
      \fbox{\usebox{\hvCaptionBox}}\\[\hvBelowCaptionSkip]\fbox{\usebox{\hvObjectBox}}%
    \else
      \usebox{\hvCaptionBox}\[\hvBelowCaptionSkip]\usebox{\hvObjectBox}%
    \fi
    \end{minipage} %
  \else
    \if\hvSet@capPos\hv@Bottom
      \ifdim\wd\hvCaptionBox>\wd\hvObjectBox
        \begin{minipage}{\wd\hvCaptionBox} %
        \else
          \begin{minipage}{\wd\hvObjectBox} %
          \fi
        \end{minipage} %
    \else
      %
    \fi
  \else
    %
  \fi
\fi
\fi
% now we rotate the object and caption, if needed
\ifx\hvSet@rotAngle\hv@Zero
  \usebox{\@tempboxa}
\else
  \rotatebox{\hvSet@rotAngle}{\usebox{\@tempboxa}}
\fi
\ifhv@nonFloat
\ifsx\hvSet@objectPos\hv@Center
  \hspace{\fill}
\fi
\fi
\endgroup% End the nonfloat part
\else
\end{\hv@floatType}% End the floating environment
\fi
%
\newenvironment{hvFloatEnv}[1][\textwidth]
{\minipage{#1}\center}
{\endcenter\endminipage}
%
\endinput