The `pgfcet` package

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March 13, 2025

The `pgfcet` package exposes the perceptually-uniform colour maps presented by colorcet.com in a form suitable for use as colourmaps with the `pgfplots` library. You must be using `pgfplots` with `tikz` for the colour maps to be available. Otherwise, the package has no dependencies besides the `xstring` package, which will be loaded if not yet imported.

Usage

Installing the package is as simple as copying `tikzlibrarypgfcet.code.tex` into the same folder as the LaTeXsource file you are compiling. To load the library of colour maps, use the command

```
\usetikzlibrary{pgfcet}
```

and then load individual colour maps using the macro

```
\pgfcetloadcmap{XXX}
```

where `XXX` is replaced by the identifier of the colour map from the webpage https://colorcet.com/gallery.html (minus the CET- prefix), for example `L20` or `D01A`. To then use the colourmap, it can be loaded in an axis using the property

```
colormap name=cet-XXX
```

The colorcet colour maps

The maps used in colorcet were produced by Peter Kovesi. More information is available at colorcet.com, or in

Kovesi, P. (2015)
Good Colour Maps: How to Design Them *https://arxiv.org/abs/1509.03700*

Example

The plot in figure 1 is produced using the code

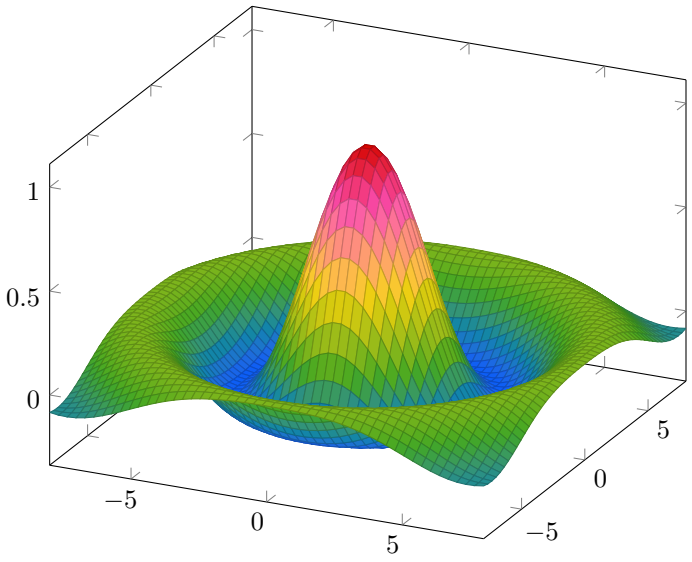

Figure 1: A sample plot

```
\usetikzlibrary{pgfcet}
\pgfcetloadcmap{R3}

\begin{figure}
    \centering
    \begin{tikzpicture}
        \begin{axis}[colormap name=cet-R3, width=10cm]
            \addplot3[
            surf,
            samples=50,
            domain=-8:8]
            {sin(deg(sqrt(x^2+y^2)))/sqrt(x^2+y^2)};
        \end{axis}
    \end{tikzpicture}
    \caption{A sample plot}
    \label{fig:example}
\end{figure}
```