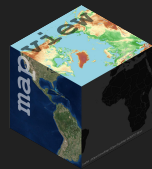# mapview

Tim Appelhans

Christoph Reudenbach & Florian Detsch

Who am I?

tim-salabim (r-spatial)
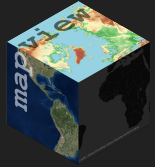
@TimSalabim3

tim.appelhans@gmail.com

Hello
my name is

Tim

Who am I?

Since 2019: Director Data Science at METER Group https://www.metergroup.com/

2017 - 2019: Geodata Scientist at GfK

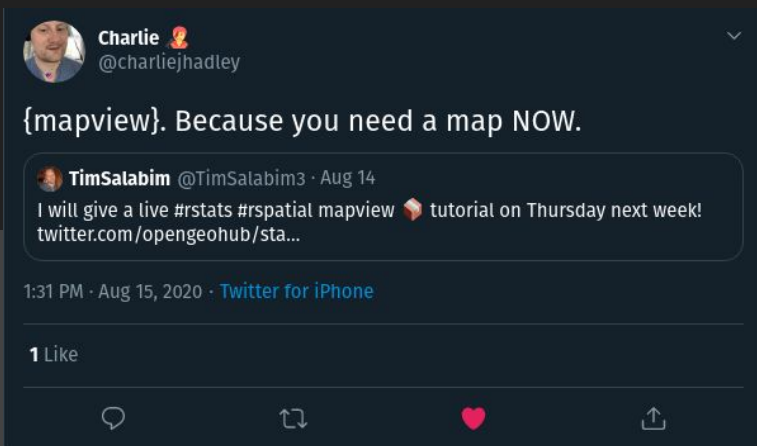2010 - 2017: Lecturer at Environmental Informatics, University of Marburg

2005 - 2010: PhD Geography, University of Canterbury

1998 - 2005: Dipl. Geography, FAU University Erlangen-Nürnberg

Why mapview?

Charlie 🧑‍💻
@charliejhadley

{mapview}. Because you need a map NOW.

TimSalabim @TimSalabim3 · Aug 14
I will give a live #rstats #rspatial mapview 📦 tutorial on Thursday next week!
twitter.com/opengeohub/sta...

1:31 PM · Aug 15, 2020 · Twitter for iPhone

1 Like

https://twitter.com/charliejhadley/status/1294597569105068032

- Because R has no built-in interactive plot functionality
- Because I was annoyed by having to switch between R & QGIS
- Because RStudio released {leaflet}
- Because {leaflet} is too verbose
- Because we need to be able to visualise things quickly and simply
- Because background maps can be a great visual aid
- Because creating plotting packages is fun!

Why mapview?

First commit of a mapview-esque function:

https://github.com/environmentalinformatics-marburg/Rsenal/commit/58422a3a217cf0adaebe2c6634b0ecedf4e23a16#diff-7aa7de3809372fb3a13719a428a2c274

Dear list members,

I would like to draw your attention to a little 'project' I've been
working on over the past few weeks.

Using leaflet for R, I have defined some methods for spatial data (e.g.
Raster*, Spatial* objects) to quickly visualise them in either the
RStudio Viewer pan or the default web browser. The function I created
for this is called mapView().

Think of it as an interactive version of spplot()/plot() for spatial
data (though less versatile). It enables zooming, paning and basic layer
queries (i.e. printing of the attributes in the @data slot of Spatial*
objects + the x/y location of the feature). For Raster* objects queries
are currently not available as leaflet translates the data into RGB
values for display. Furthermore, background maps can be defined and
multiple different spatial object layers can be overlaid.
At the moment mapView() lives in our Rsenal package on github
(https://github.com/environmentalinformatics-marburg/Rsenal) but this is
likely going to change at some point in the not too distant future. This
also depends on whether there is active interest in developing this
sort of thing further to provide more than the current admittedly rather
limited functionality. This, however, would involve JavaScript coding
which I do not have any experience with.

A quick (non-interactive) intorduction can be found here:

https://metvurst.wordpress.com/

The full introductory article including interactive examples is
published here:

http://environmentalinformatics-marburg.github.io/web-presentations/20150723_mapView.html
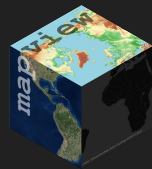
I hope this may prove useful for some of you.
Also, if anyone is keen to get involved in taking this further, please
let me know and we will see how to best proceed.

Best,
Tim

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###################################
Tim Appelhans
Department of Geography
Environmental Informatics
Philipps Universität Marburg
Deutschhausstraße 12
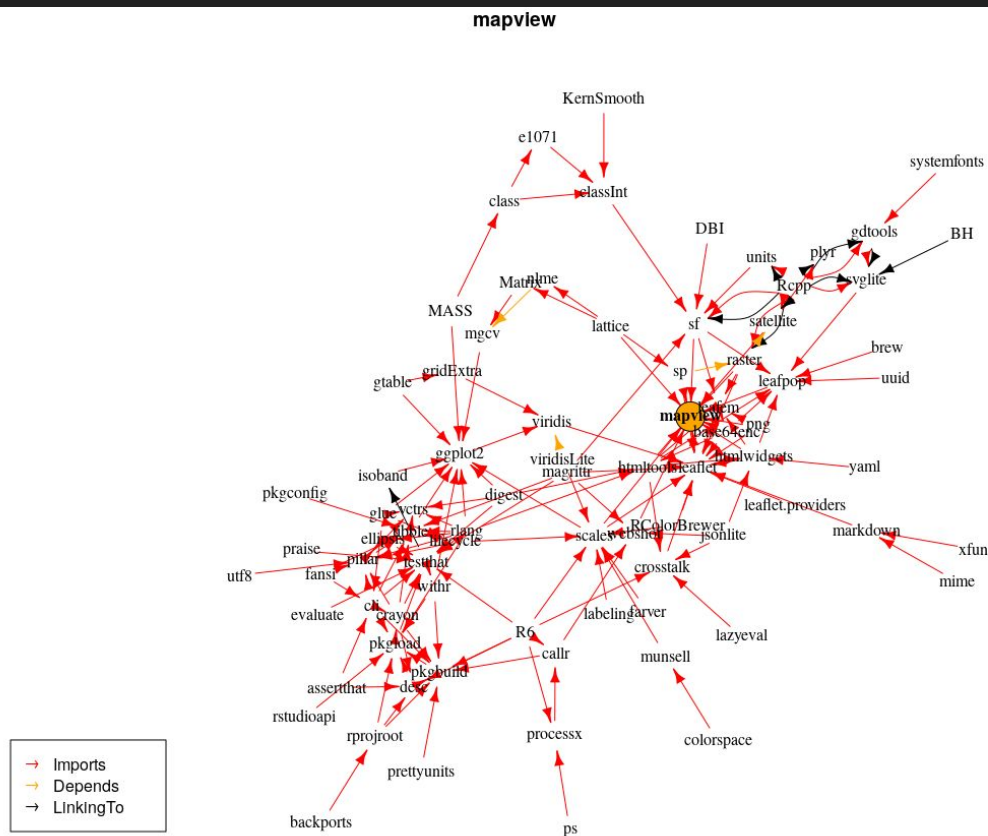35032 Marburg (Paketpost: 35037 Marburg)
Germany

Why mapview?

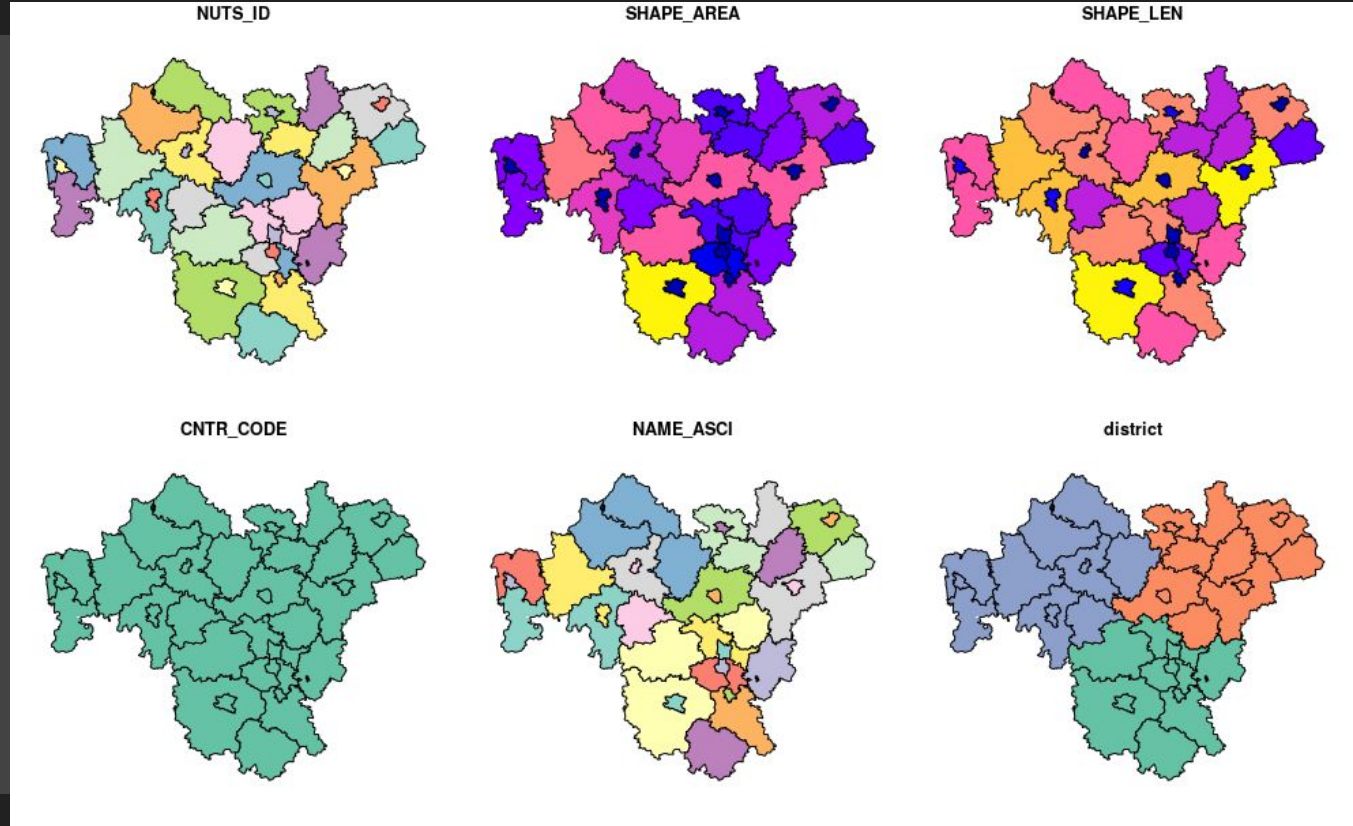In 2020 a full-blown package with lots of dependencies (probably too many).

Most important:
* leafem
* leafpop
* (leaflet)

What's in the box?

plot(franconia)

What's in the box?

mapview(franconia)

Should be able to throw pretty much anything at mapview...