

Mappeoppgave1

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library(janitor)
library(tidyverse)
library(lubridate)
library(zoo)
library(ggplot2)

{r
#oppgave 1

lower <-

read_table("https://www.nsstc.uah.edu/data/msu/v6.0/tlt/uahncdc_lt_6.0.txt")
%>%
  .[1:which(.$Year %in% "Year")-1, ] %>%
  clean_names() %>%
  .[, 1:3] %>%
  mutate(dato = ymd(paste(.$year, .$mo, 1, sep = "-"))) %>%
  mutate_if(is.character, ~as.numeric(.)) %>%
  select(dato, globe) %>%
  mutate(glidende_snitt = rollmean(globe, 13, fill = NA, align = "center"))

lower %>%
  ggplot(aes(x=dato, y=globe)) + geom_line(col="blue") + theme_bw() +
  geom_point(shape=1, col="blue") +
  geom_line(aes(y=glidende_snitt), col="red", lwd=1.2) +
  labs(x = "Latest Global Average Tropospheric Temperatures",
       y = "T Depature from 91-20 Avg. (deg.C)") +
  theme(axis.text.x = element_text(angle = 90, hjust = 1))

#Oppgave 2

scrape_bake <- function(url, location) {
  return(read_table(url) %>%
    .[1:which(.$Year %in% "Year")-1, ] %>%
    clean_names() %>%
    mutate(dato = ymd(paste(.$year, .$mo, 1, sep = "-"))) %>%
    mutate_if(is.character, ~as.numeric(.)) %>%
    mutate(nivå = paste0(location)))

url_list <-
list("http://vortex.nsstc.uah.edu/data/msu/v6.0/tlt/uahncdc_lt_6.0.txt",

"http://vortex.nsstc.uah.edu/data/msu/v6.0/tmt/uahncdc_mt_6.0.txt",
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"http://vortex.nsstc.uah.edu/data/msu/v6.0/ttp/uahncdc_tp_6.0.txt",

"http://vortex.nsstc.uah.edu/data/msu/v6.0/tls/uahncdc_ls_6.0.txt")
location_list <- list("Lower Troposphere", "Mid-Troposphere", "Tropopause",
"Lower Stratosphere")

d.frame <- map2(url_list, location_list, scrape_bake)
d.frame <- ldply(d.frame, data.frame)
d.frame <- d.frame %>%
  select(dato, no_pol, nivå) %>%
  as_tibble() %>%
  mutate(gj.snitt.alle = mean(no_pol))

ggplot(d.frame, aes(x = dato, y = no_pol, color = nivå)) + geom_line(linetype
= "dashed") +
  theme_bw() + geom_point(shape = 1)

df %>%
  ggplot(aes(x=deaths_per_100k, y=fully_vaccinated_pct_of_pop)) +
  geom_point(shape=21, fill="Blue", size=2, label=name) + geom_text(hjust=0,
vjust=0)

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