InToxSa\_throughput

R Guerillot

2023-03-06

library(tidyverse)

## ── Attaching core tidyverse packages ──────────────────────── tidyverse 2.0.0 ──  
## ✔ dplyr 1.1.0 ✔ readr 2.1.4  
## ✔ forcats 1.0.0 ✔ stringr 1.5.0  
## ✔ ggplot2 3.4.1 ✔ tibble 3.1.8  
## ✔ lubridate 1.9.2 ✔ tidyr 1.3.0  
## ✔ purrr 1.0.1   
## ── Conflicts ────────────────────────────────────────── tidyverse\_conflicts() ──  
## ✖ dplyr::filter() masks stats::filter()  
## ✖ dplyr::lag() masks stats::lag()  
## ℹ Use the ]8;;http://conflicted.r-lib.org/conflicted package]8;; to force all conflicts to become errors

library(here)

## here() starts at /home/rguerillot/Documents/Travail/Paper/InToxSa/github\_repo/InToxSa

library(patchwork)  
#setwd(here())  
print(getwd())

## [1] "/home/rguerillot/Documents/Travail/Paper/InToxSa/github\_repo/InToxSa/eLife\_revision"

Checking experiment throughput from plate dates

d <- read.csv("../2-Raw\_data/dates", header = F, col.names = "expdate")   
  
d$date <- as.Date(as.character(d$expdate), format='%y%m%d')  
d$next\_date <- c(d$date[2:length(d$date)], "2019-09-05")  
d$nb\_days\_between\_plates <- d$next\_date - d$date  
d$year <- strftime(d$date, format = "%Y")  
d$week\_number <- strftime(d$date, format = "%V")  
  
knitr::kable(d)

| expdate | date | next\_date | nb\_days\_between\_plates | year | week\_number |
| --- | --- | --- | --- | --- | --- |
| 190831 | 2019-08-31 | 2019-09-05 | 5 days | 2019 | 35 |
| 190905 | 2019-09-05 | 2019-09-09 | 4 days | 2019 | 36 |
| 190909 | 2019-09-09 | 2019-09-21 | 12 days | 2019 | 37 |
| 190921 | 2019-09-21 | 2019-09-23 | 2 days | 2019 | 38 |
| 190923 | 2019-09-23 | 2019-11-07 | 45 days | 2019 | 39 |
| 191107 | 2019-11-07 | 2019-11-09 | 2 days | 2019 | 45 |
| 191109 | 2019-11-09 | 2019-11-11 | 2 days | 2019 | 45 |
| 191111 | 2019-11-11 | 2019-11-15 | 4 days | 2019 | 46 |
| 191115 | 2019-11-15 | 2019-11-16 | 1 days | 2019 | 46 |
| 191116 | 2019-11-16 | 2019-11-20 | 4 days | 2019 | 46 |
| 191120 | 2019-11-20 | 2019-11-21 | 1 days | 2019 | 47 |
| 191121 | 2019-11-21 | 2019-11-29 | 8 days | 2019 | 47 |
| 191129 | 2019-11-29 | 2019-11-30 | 1 days | 2019 | 48 |
| 191130 | 2019-11-30 | 2019-12-05 | 5 days | 2019 | 48 |
| 191205 | 2019-12-05 | 2019-12-06 | 1 days | 2019 | 49 |
| 191206 | 2019-12-06 | 2020-02-19 | 75 days | 2019 | 49 |
| 200219 | 2020-02-19 | 2020-02-26 | 7 days | 2020 | 08 |
| 200226 | 2020-02-26 | 2020-02-28 | 2 days | 2020 | 09 |
| 200228 | 2020-02-28 | 2020-03-09 | 10 days | 2020 | 09 |
| 200309 | 2020-03-09 | 2020-03-13 | 4 days | 2020 | 11 |
| 200313 | 2020-03-13 | 2020-03-19 | 6 days | 2020 | 11 |
| 200319 | 2020-03-19 | 2020-03-20 | 1 days | 2020 | 12 |
| 200320 | 2020-03-20 | 2020-03-21 | 1 days | 2020 | 12 |
| 200321 | 2020-03-21 | 2020-07-30 | 131 days | 2020 | 12 |
| 200730 | 2020-07-30 | 2020-07-31 | 1 days | 2020 | 31 |
| 200731 | 2020-07-31 | 2020-07-31 | 0 days | 2020 | 31 |
| 200731 | 2020-07-31 | 2020-08-01 | 1 days | 2020 | 31 |
| 200801 | 2020-08-01 | 2020-08-02 | 1 days | 2020 | 31 |
| 200802 | 2020-08-02 | 2020-08-05 | 3 days | 2020 | 31 |
| 200805 | 2020-08-05 | 2020-08-16 | 11 days | 2020 | 32 |
| 200816 | 2020-08-16 | 2020-08-17 | 1 days | 2020 | 33 |
| 200817 | 2020-08-17 | 2020-08-22 | 5 days | 2020 | 34 |
| 200822 | 2020-08-22 | 2020-08-23 | 1 days | 2020 | 34 |
| 200823 | 2020-08-23 | 2020-09-02 | 10 days | 2020 | 34 |
| 200902 | 2020-09-02 | 2020-09-03 | 1 days | 2020 | 36 |
| 200903 | 2020-09-03 | 2020-09-13 | 10 days | 2020 | 36 |
| 200913 | 2020-09-13 | 2020-09-19 | 6 days | 2020 | 37 |
| 200919 | 2020-09-19 | 2020-10-30 | 41 days | 2020 | 38 |
| 201030 | 2020-10-30 | 2020-10-31 | 1 days | 2020 | 44 |
| 201031 | 2020-10-31 | 2020-11-03 | 3 days | 2020 | 44 |
| 201103 | 2020-11-03 | 2020-11-12 | 9 days | 2020 | 45 |
| 201112 | 2020-11-12 | 2020-11-16 | 4 days | 2020 | 46 |
| 201116 | 2020-11-16 | 2020-11-22 | 6 days | 2020 | 47 |
| 201122 | 2020-11-22 | 2021-02-10 | 80 days | 2020 | 47 |
| 210210 | 2021-02-10 | 2021-02-17 | 7 days | 2021 | 06 |
| 210217 | 2021-02-17 | 2021-02-19 | 2 days | 2021 | 07 |
| 210219 | 2021-02-19 | 2021-02-21 | 2 days | 2021 | 07 |
| 210221 | 2021-02-21 | 2021-02-22 | 1 days | 2021 | 07 |
| 210222 | 2021-02-22 | 2021-03-18 | 24 days | 2021 | 08 |
| 210318 | 2021-03-18 | 2021-03-19 | 1 days | 2021 | 11 |
| 210319 | 2021-03-19 | 2021-03-20 | 1 days | 2021 | 11 |
| 210320 | 2021-03-20 | 2021-03-21 | 1 days | 2021 | 11 |
| 210321 | 2021-03-21 | 2021-03-23 | 2 days | 2021 | 11 |
| 210323 | 2021-03-23 | 2021-03-24 | 1 days | 2021 | 12 |
| 210324 | 2021-03-24 | 2021-03-25 | 1 days | 2021 | 12 |
| 210325 | 2021-03-25 | 2021-03-26 | 1 days | 2021 | 12 |
| 210326 | 2021-03-26 | 2021-03-27 | 1 days | 2021 | 12 |
| 210327 | 2021-03-27 | 2021-03-27 | 0 days | 2021 | 12 |
| 210327 | 2021-03-27 | 2021-03-28 | 1 days | 2021 | 12 |
| 210328 | 2021-03-28 | 2021-03-30 | 2 days | 2021 | 12 |
| 210330 | 2021-03-30 | 2022-03-03 | 338 days | 2021 | 13 |
| 220303 | 2022-03-03 | 2022-03-08 | 5 days | 2022 | 09 |
| 220308 | 2022-03-08 | 2022-03-09 | 1 days | 2022 | 10 |
| 220309 | 2022-03-09 | 2022-03-16 | 7 days | 2022 | 10 |
| 220316 | 2022-03-16 | 2022-03-28 | 12 days | 2022 | 11 |
| 220328 | 2022-03-28 | 2019-09-05 | -935 days | 2022 | 13 |

day\_count <- count(d, nb\_days\_between\_plates) %>%  
 filter(nb\_days\_between\_plates >= 0) %>%  
 print()

## nb\_days\_between\_plates n  
## 1 0 days 2  
## 2 1 days 23  
## 3 2 days 8  
## 4 3 days 2  
## 5 4 days 5  
## 6 5 days 4  
## 7 6 days 3  
## 8 7 days 3  
## 9 8 days 1  
## 10 9 days 1  
## 11 10 days 3  
## 12 11 days 1  
## 13 12 days 2  
## 14 24 days 1  
## 15 41 days 1  
## 16 45 days 1  
## 17 75 days 1  
## 18 80 days 1  
## 19 131 days 1  
## 20 338 days 1

ggplot(day\_count, aes( x = nb\_days\_between\_plates, y = n)) +  
 geom\_bar(stat = "identity") +  
 xlim(-1, 14)

## Warning: Removed 7 rows containing missing values (`position\_stack()`).

