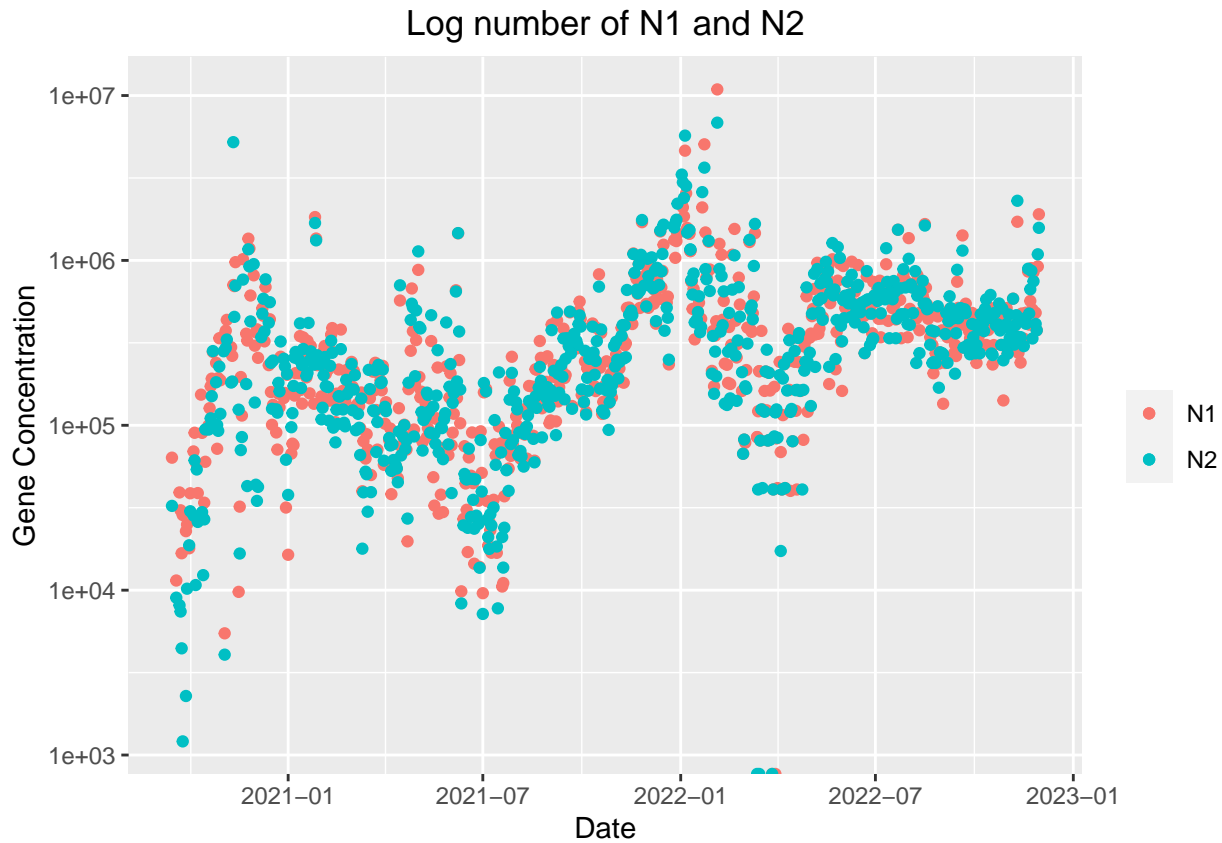


Longitudinal Waste data

Longitudinal data source

This vignette covers the wastewater data collected by the Wisconsin State Lab of Hygiene. This wastewater data covers 118 weeks of 1-5 measurements a week from 82 locations. This has 63 columns where 5 are categorical variables, 9 are measurement columns and the remaining are extra info about the measurements.

The data is broken down by site and data. Site is where it was collected from. The primary column's are N1 and N2 which are two different genes of Covid-19.



Below is the first 6 rows of the dataset.

| sample_id | site | date | N1 | N2 | PMMoV | flow |
|-----------|-----------------|------------|-----------|-----------|----------|--------|
| 802 | Port Washington | 2021-01-18 | 8865.376 | 6652.533 | 18829610 | 1.000 |
| 827 | Port Washington | 2021-01-25 | 11827.504 | 7268.768 | 10190701 | 1.000 |
| 819 | Racine | 2021-01-24 | 8333.173 | 6484.469 | 6165848 | 15.890 |
| 544867001 | Washburn | 2021-01-25 | 15421.000 | 30958.000 | 14401613 | 0.149 |
| 544887001 | Peshtigo | 2021-01-25 | 23272.000 | 35748.000 | 4397675 | 0.444 |
| 813 | South Milwaukee | 2021-01-24 | 14383.477 | 8851.371 | 7323669 | 2.588 |

| ph | pcr_type | n1_sars_cov2_lod | n2_sars_cov2_lod | n1_lod |
|------|---------------------|------------------|------------------|-----------|
| NA | droplet digital PCR | FALSE | FALSE | 3319.264 |
| NA | droplet digital PCR | FALSE | FALSE | 3102.181 |
| 7.16 | droplet digital PCR | FALSE | FALSE | 2773.056 |
| 7.70 | qPCR | TRUE | TRUE | 40000.000 |
| 7.60 | qPCR | TRUE | TRUE | 40000.000 |
| NA | droplet digital PCR | FALSE | FALSE | 3319.264 |

| n1_loq | n2_lod | n2_loq |
|------------|-----------|------------|
| 11078.219 | 3319.264 | 11078.219 |
| 10342.939 | 3102.181 | 10342.939 |
| 9257.525 | 2773.056 | 9257.525 |
| 130000.000 | 66000.000 | 140000.000 |
| 130000.000 | 66000.000 | 140000.000 |
| 11064.213 | 3319.264 | 11064.213 |

This data is our most used data that is used in multiple analyses. A couple of examples are below.

[WPHA Poster](#)

[SETAC Poster](#)