

ambient_sound

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```
snd.fl <- list.files(path = csv.dir, pattern = "~nyu", full.names = TRUE)
snd.fl.df <- lapply(snd.fl, read.csv)
snd.df <- Reduce(function(x, y) merge(x, y, all=TRUE),
                  snd.fl.df)
```

```
ggplot(data = snd.df, aes(x=db.avg)) +
  geom_histogram() +
  facet_wrap(facets = c("sub.num")) +
  xlab("db Average") +
  theme_classic() +
  theme(legend.position = "none",
        axis.title = element_text(size = rel(1.5), face = "bold"),
        axis.title.y = element_blank(),
        axis.text = element_text(size = rel(.8)),
        axis.ticks.y = element_blank(),
        axis.text.y = element_blank())
```

`stat_bin()` using `bins = 30`. Pick better value with `binwidth`.

```
ggplot(data = snd.df, aes(x=db.peak)) +
  geom_histogram() +
  facet_wrap(facets = c("sub.num")) +
  xlab("dB peak") +
  theme_classic() +
  theme(legend.position = "none",
        axis.title = element_text(size = rel(1.5), face = "bold"),
        axis.title.y = element_blank(),
        axis.text = element_text(size = rel(.8)),
        axis.ticks.y = element_blank(),
        axis.text.y = element_blank())
```

`stat_bin()` using `bins = 30`. Pick better value with `binwidth`.

Warning: Removed 6 rows containing non-finite values (stat_bin).

```
snd.df %>%
  gather(key = snd.measure, value = db, db.avg:db.peak) %>%
  ggplot() +
  aes(x = db, fill = snd.measure) +
  geom_histogram() +
  facet_wrap(facets = c("sub.num")) +
  theme_classic() +
  theme(legend.position = "bottom",
        legend.title = element_blank(),
        legend.text = element_text(size = rel(1.2)),
        axis.title = element_blank(),
        axis.text = element_text(size = rel(.8)),
        axis.ticks.y = element_blank(),
        axis.text.y = element_blank())
```

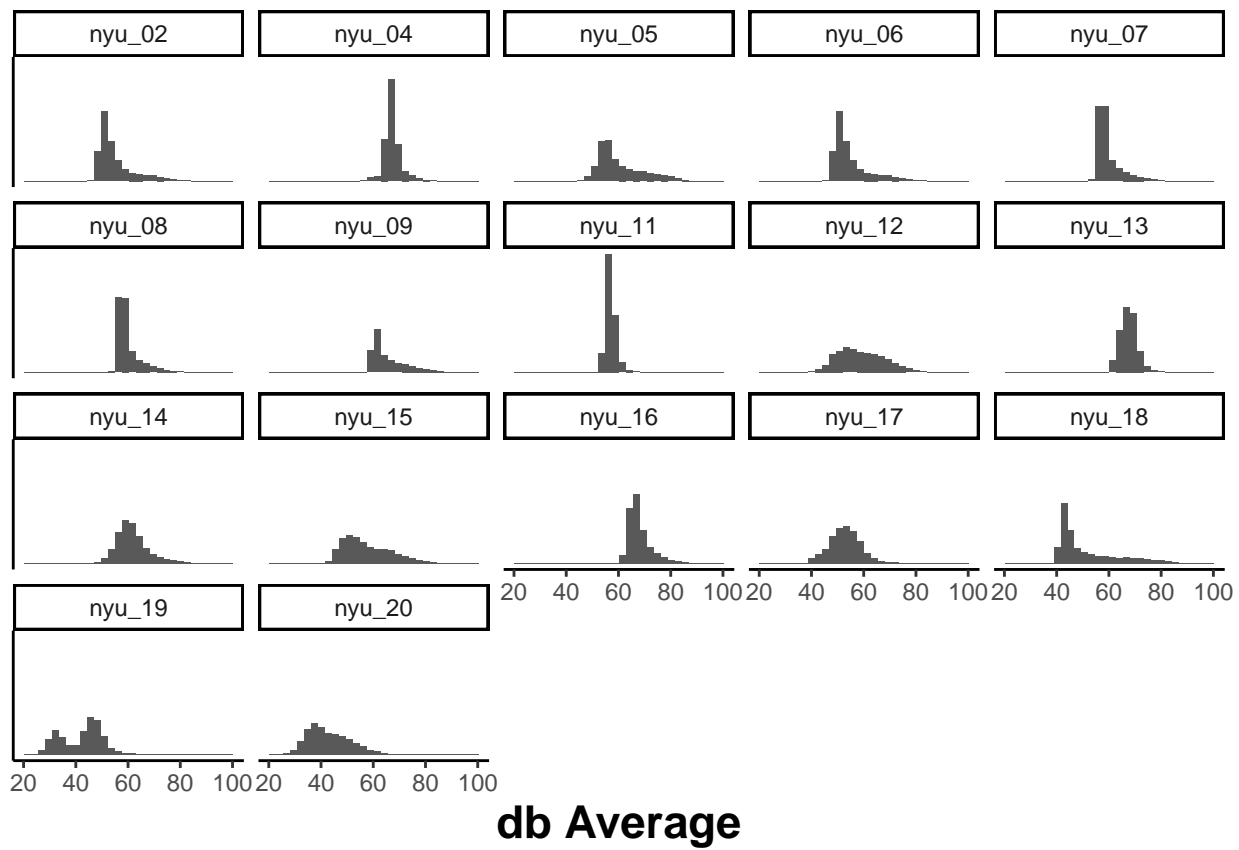


Figure 1: Average ambient sound levels in dB across 1 hr by site

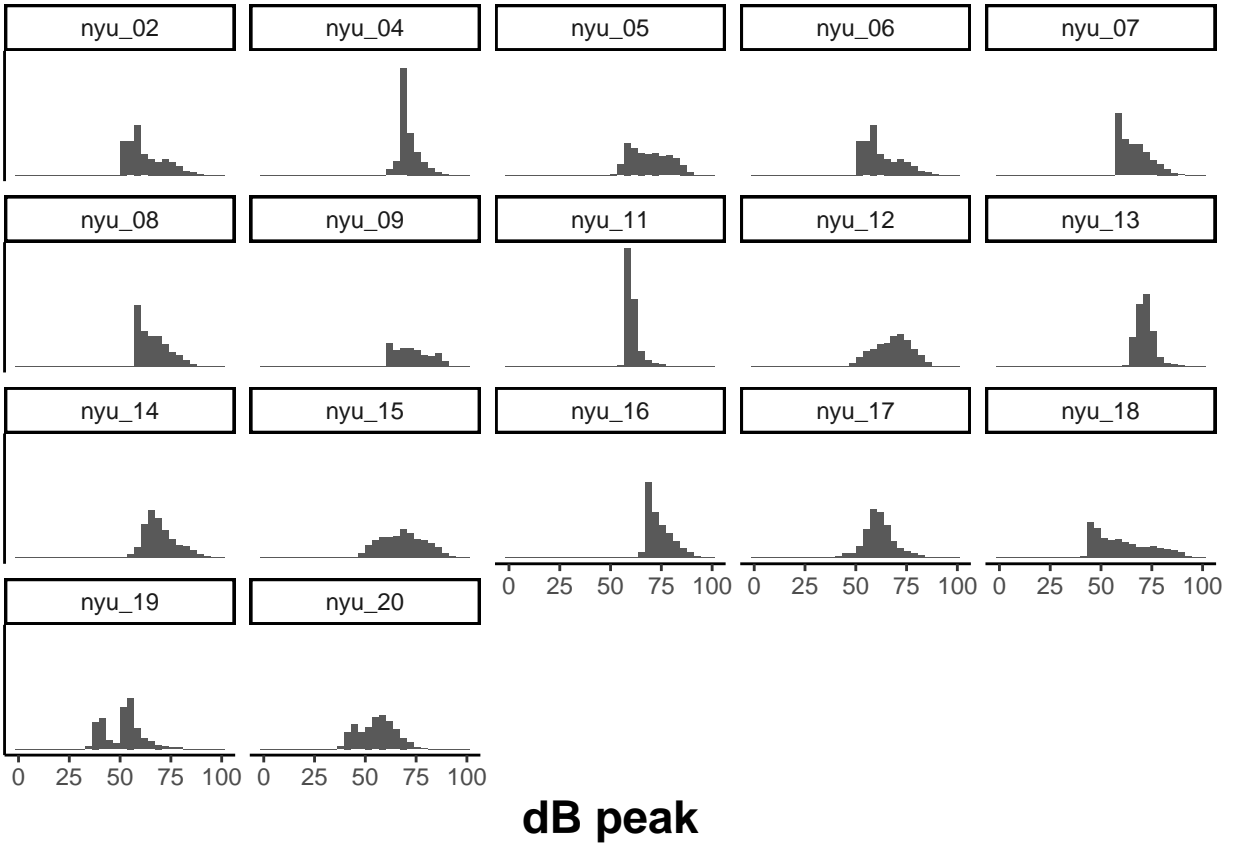


Figure 2: Peak ambient sound levels in dB across 1 hr by site

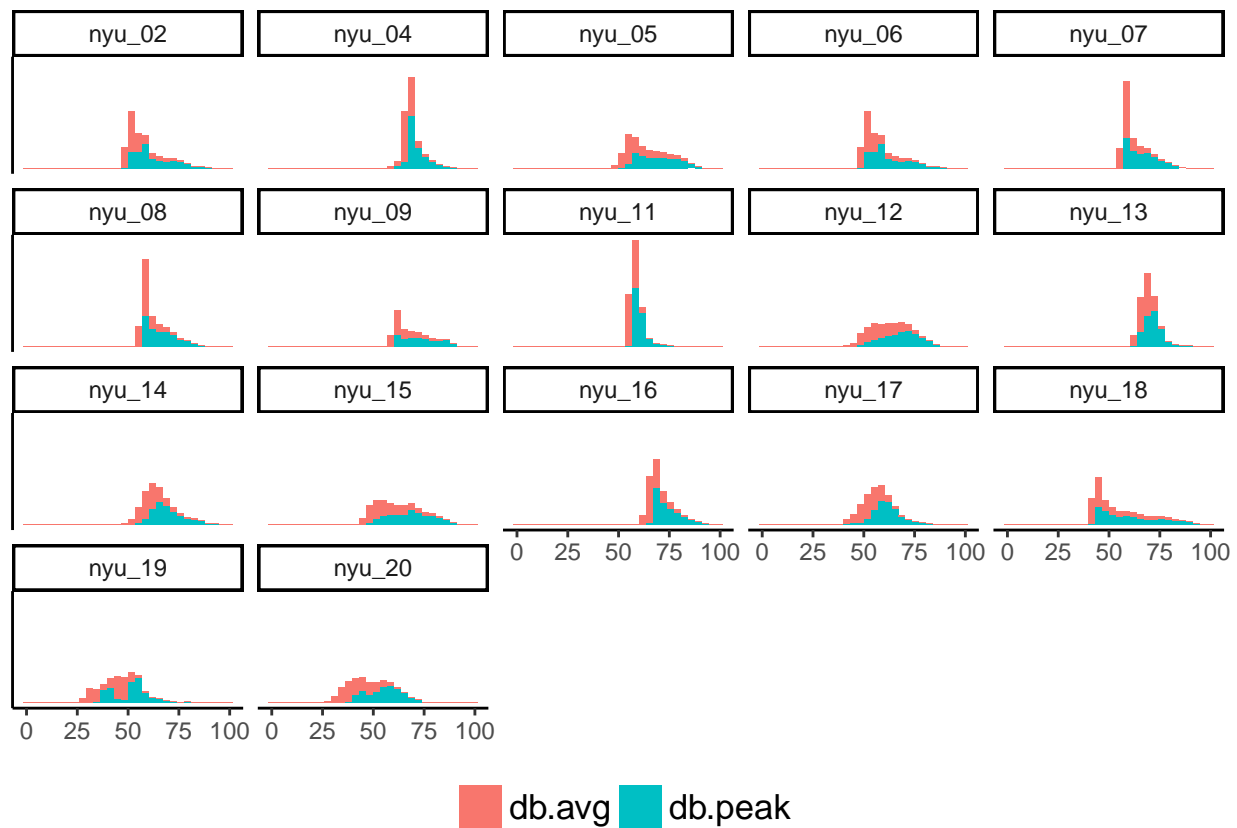


Figure 3: Average and peak ambient sounds levels across 1 hr by site

```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
## Warning: Removed 6 rows containing non-finite values (stat_bin).
```