

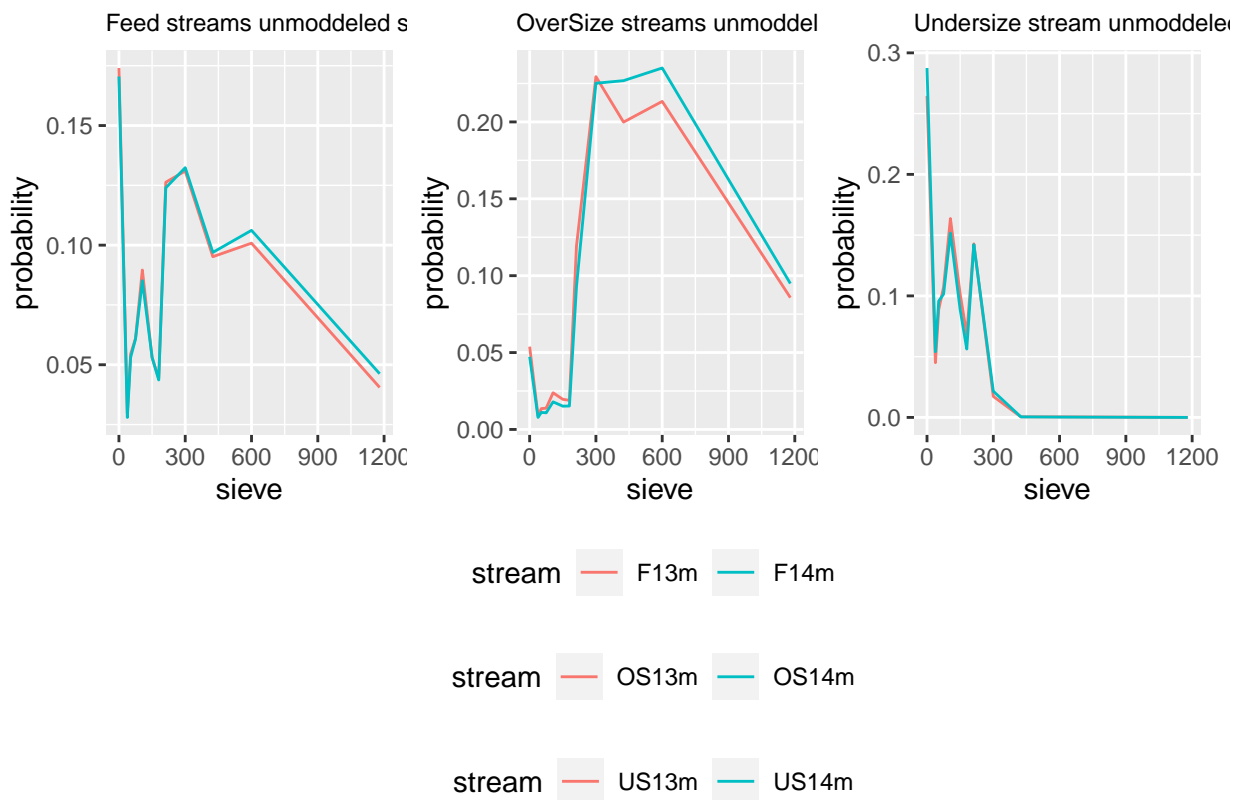
## side by side plots

Aim is not to reprint plot's axes for each plotted side-by-side plot as they are the same..can be a common axis/axes.

<https://stackoverflow.com/questions/13649473/add-a-common-legend-for-combined-ggplots> ## method 1

Each test's feed stream PSD results were first compared to confirm that their distributions were similar to allow for comparative statistics.

```
# package name: patchwork (side by side plots)
combined.plot_raw <- plot.Feedraw + plot.OSraw + plot.USraw & theme(legend.position = "bottom")
combined.plot_raw + plot_layout(guides = "collect")
```



## Method 2

Each test's feed stream PSD results were first compared to confirm that their distributions were similar to allow for comparative statistics.

difference in code starts here:

```

#combine the datasets:
combinePlotRaw <- rbind(long_feeddraw,long_OSraw,long_USraw)

combinePlotRaw <- data.frame(combinePlotRaw,
                             Df = rep(c("Feed (unmodeled)","OS (unmod.)","US (unmod.)" ),
                                     times=c(nrow(long_feeddraw),nrow(long_OSraw),nrow(

outplot_all_unmoddled <- ggplot(combinePlotRaw, aes(sieve, probability, colour = stream)) +
  geom_line() +
  geom_point() +
  ggtitle("Feed streams unmodeled solids frequency distribution.") +
  theme(plot.title = element_text(size=9)) +
  facet_wrap(~Df)

ggsave(here("05_fig_output","all_streams_preModelling.pdf"), outplot_all_unmoddled, width=10, height=8)

```

method 2 is perfect for this application:

- x and y same for all plots
- can combine with row binding...in this case no problem...with cbind will be a problem where different models(RR and GGS) have different rows due to logs.

## Method 3