Anwendung 2: Scatterplot

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Anwendung 2: Scatterplot

ggplot2 und die Daten laden:

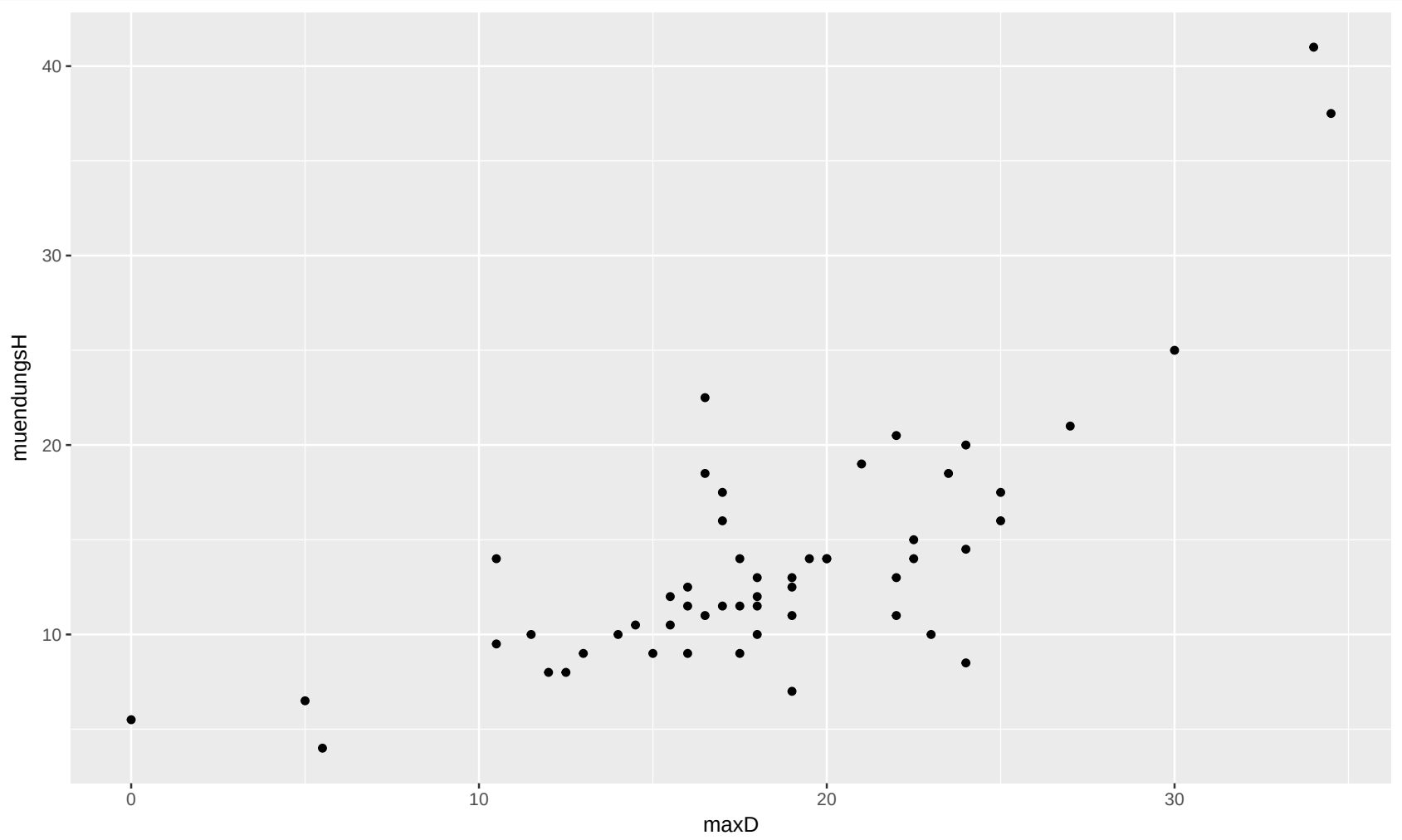
```
library(ggplot2)
```

```
df <- read.csv("../data/AtlantPottery.csv", sep = ',')
```

Anwendung 2: Scatterplot

Einfacher Plot

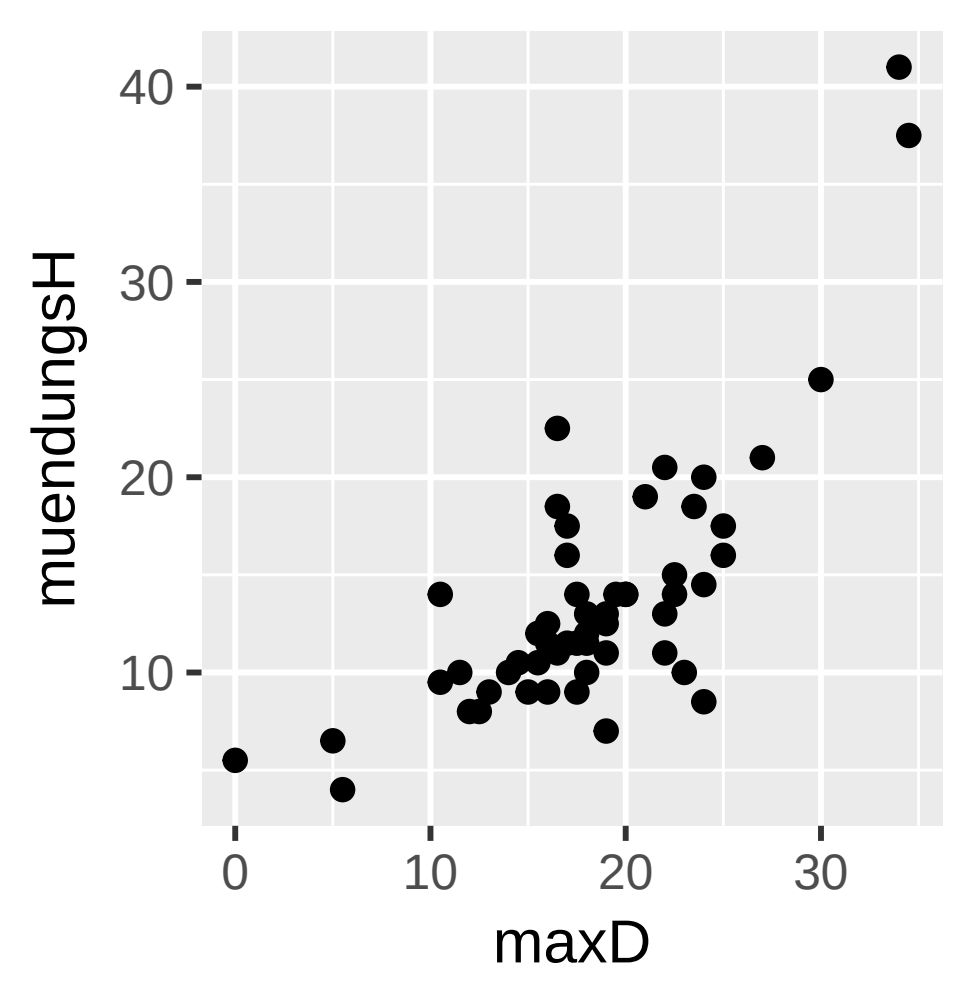
```
ggplot(df, aes(x = maxD, y = muendungsH)) +
  geom_point()
```



Anwendung 2: Scatterplot

Gleichmäßige X- und Y-Achse

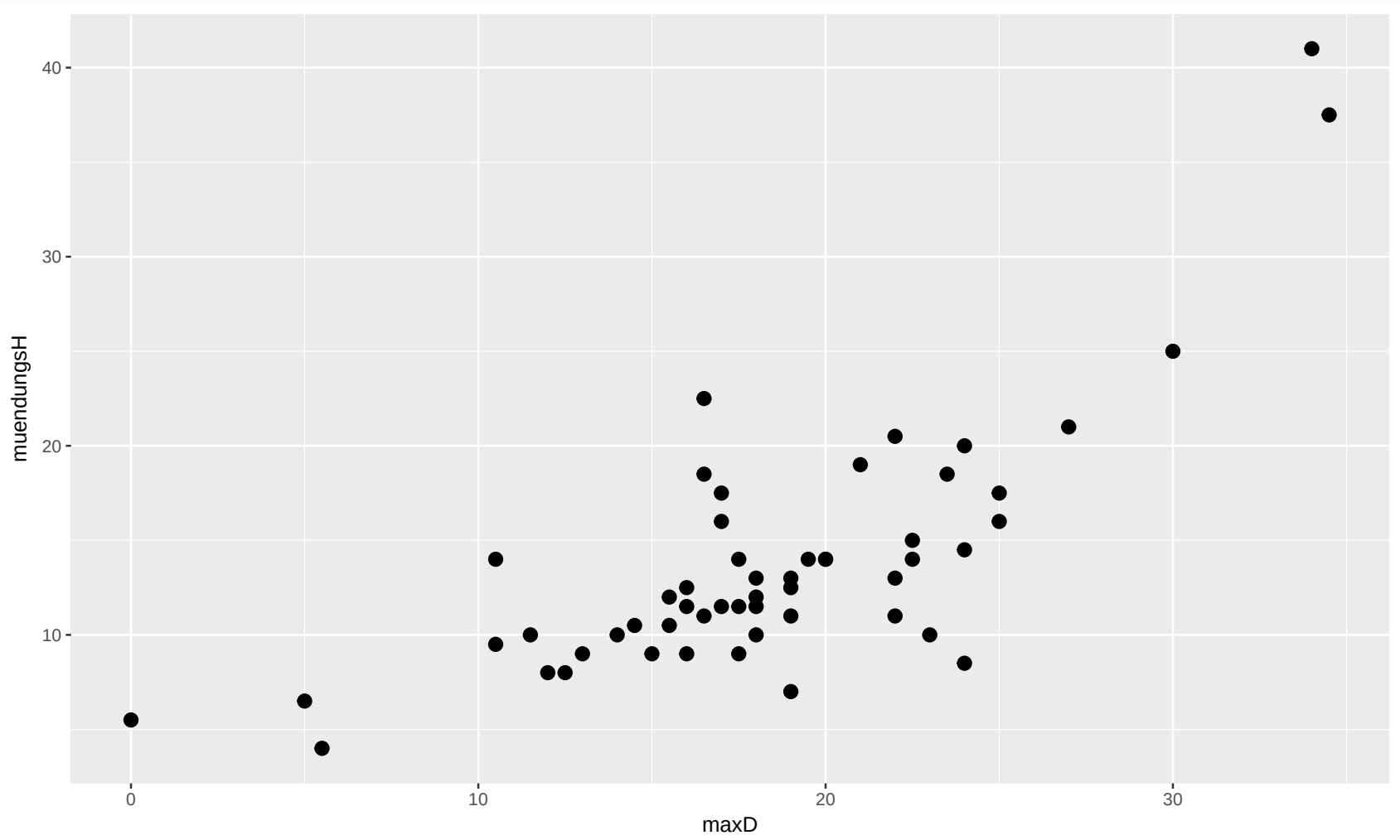
```
ggplot(df, aes(x = maxD, y = muendungsH)) +
  geom_point() +
  coord_equal()
```



Anwendung 2: Scatterplot

Symbolgröße manuell einstellen

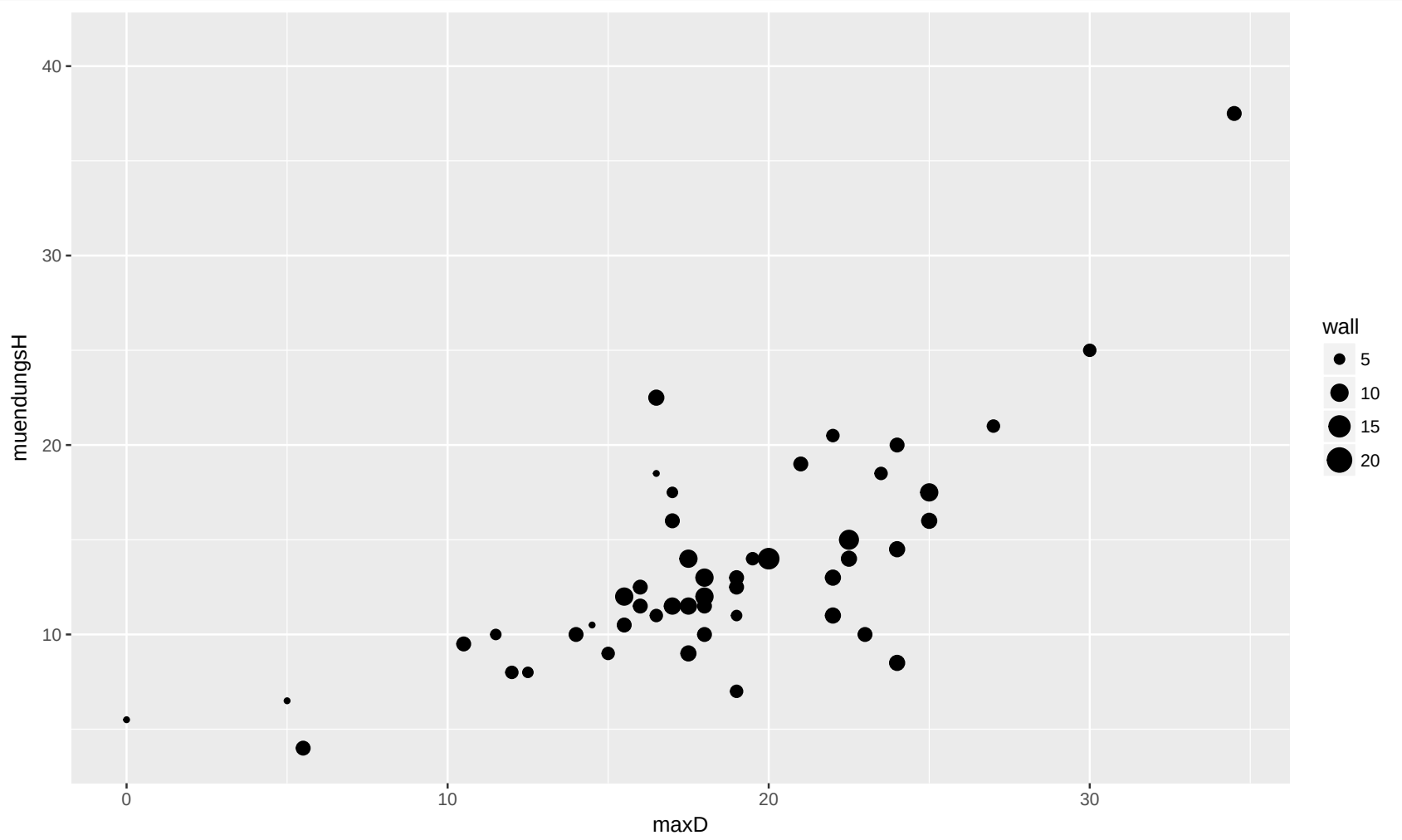
```
ggplot(df, aes(x = maxD, y = muendungsH)) +
  geom_point(size = 3)
```



Anwendung 2: Scatterplot

Symbolgröße abhängig von Variable

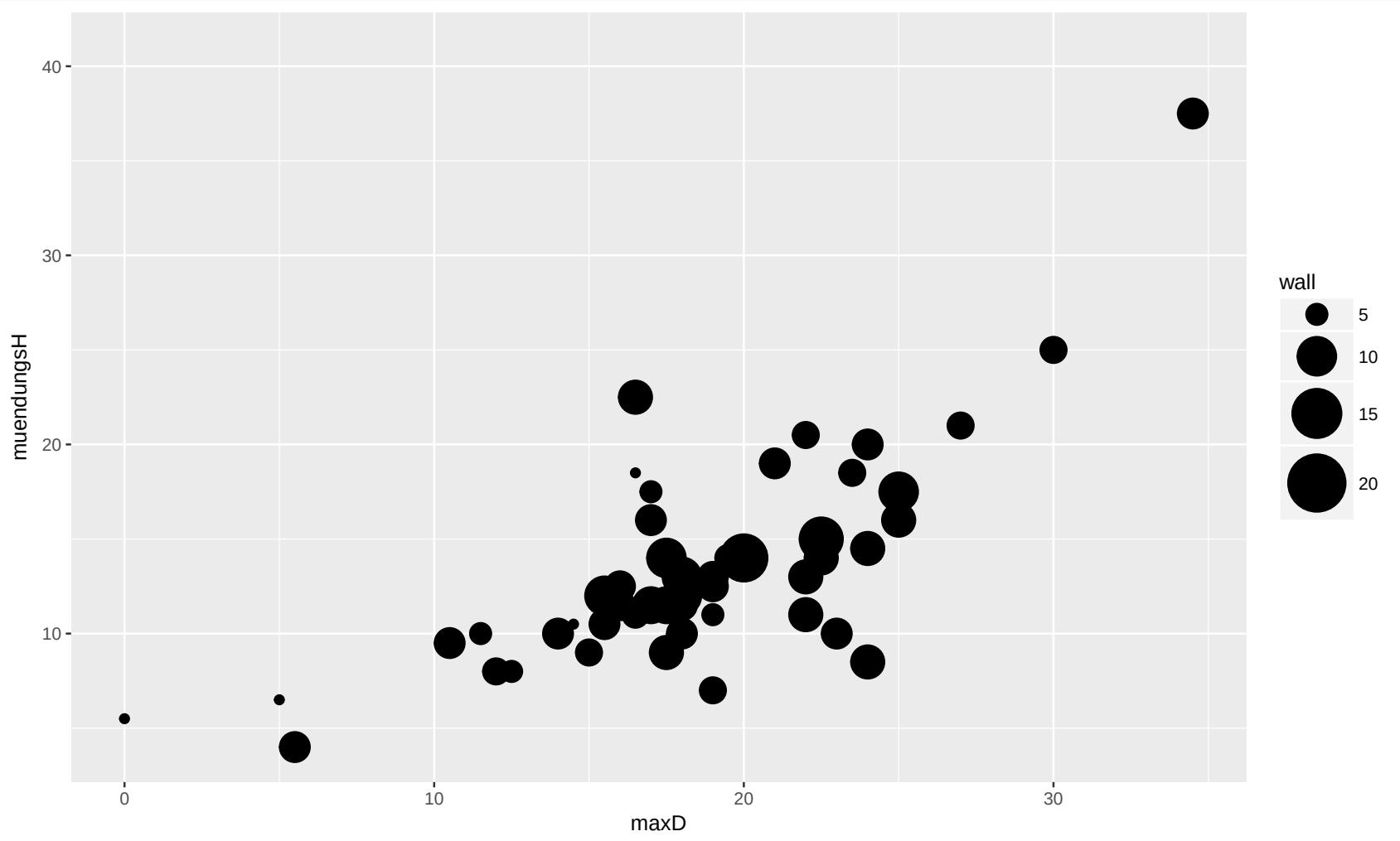
```
ggplot(df, aes(x = maxD, y = muendungsH, size = wall)) +
  geom_point()
```



Anwendung 2: Scatterplot

Grenzen für Symbolgröße

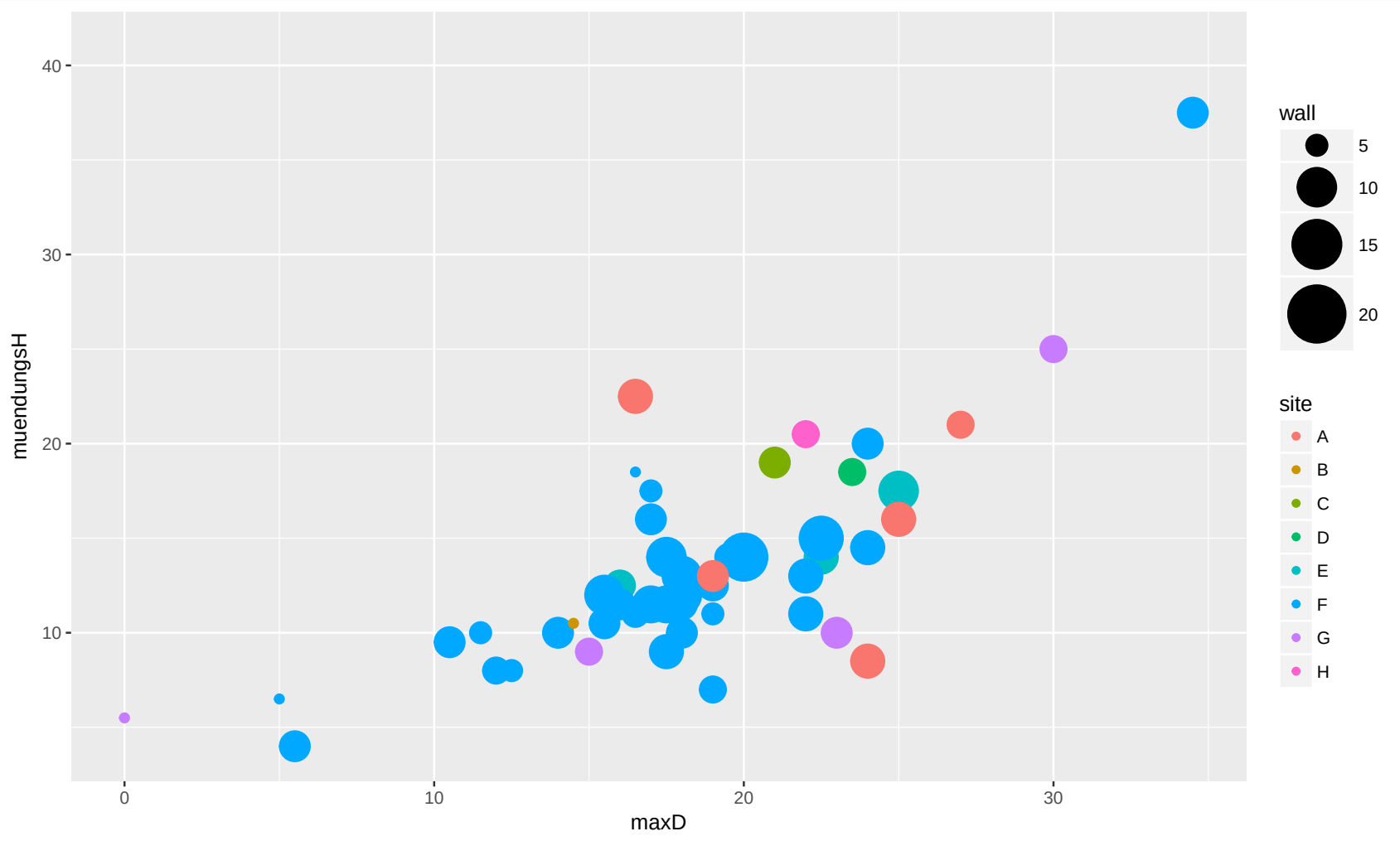
```
ggplot(df, aes(x = maxD, y = muendungsH, size = wall)) +
  geom_point() +
  scale_size_continuous(range = c(2,15))
```



Anwendung 2: Scatterplot

Füllfarbe

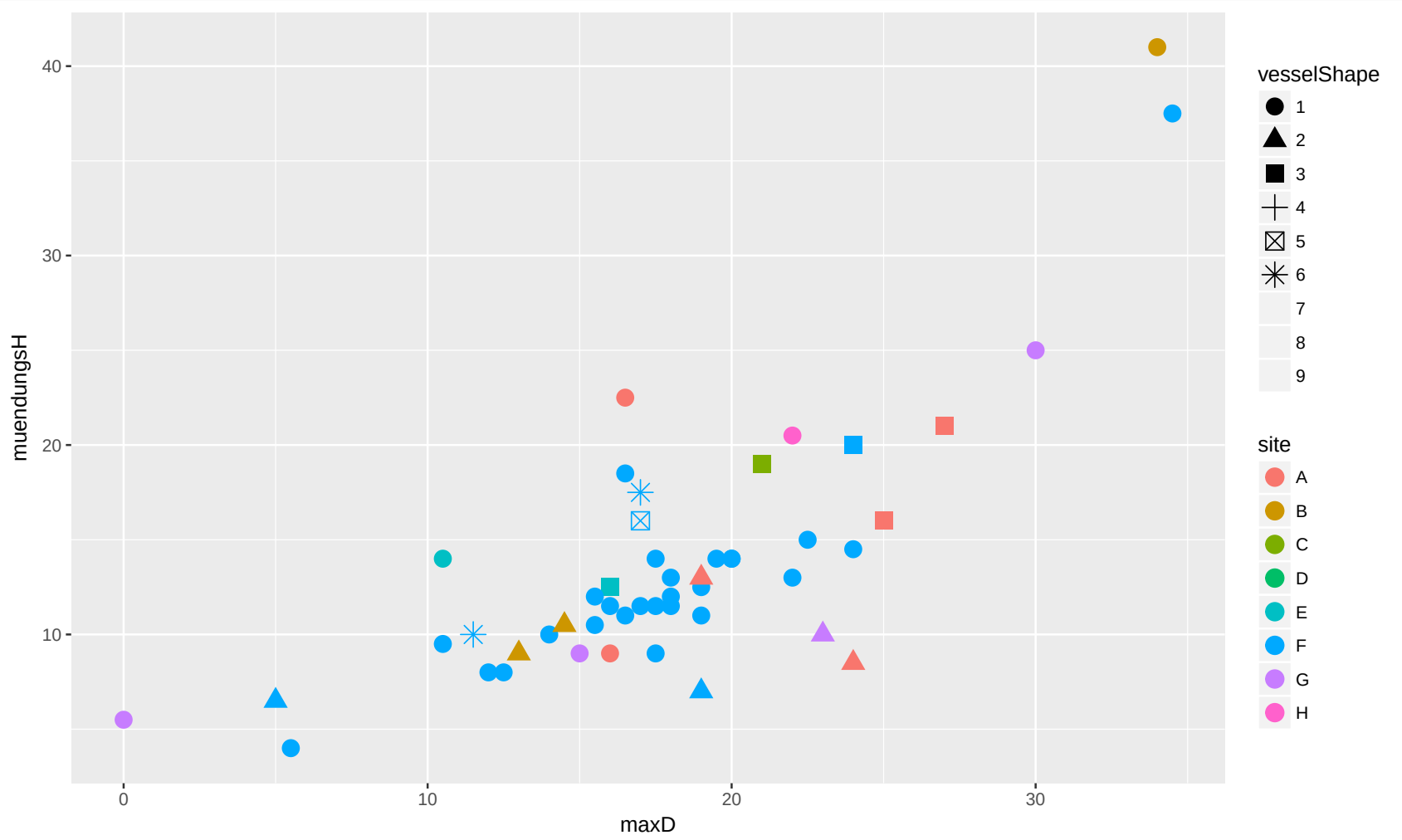
```
ggplot(df, aes(x = maxD, y = muendungsH, size = wall, color = site)) +
  geom_point() +
  scale_size_continuous(range = c(2,15))
```



Anwendung 2: Scatterplot

Symboltypen

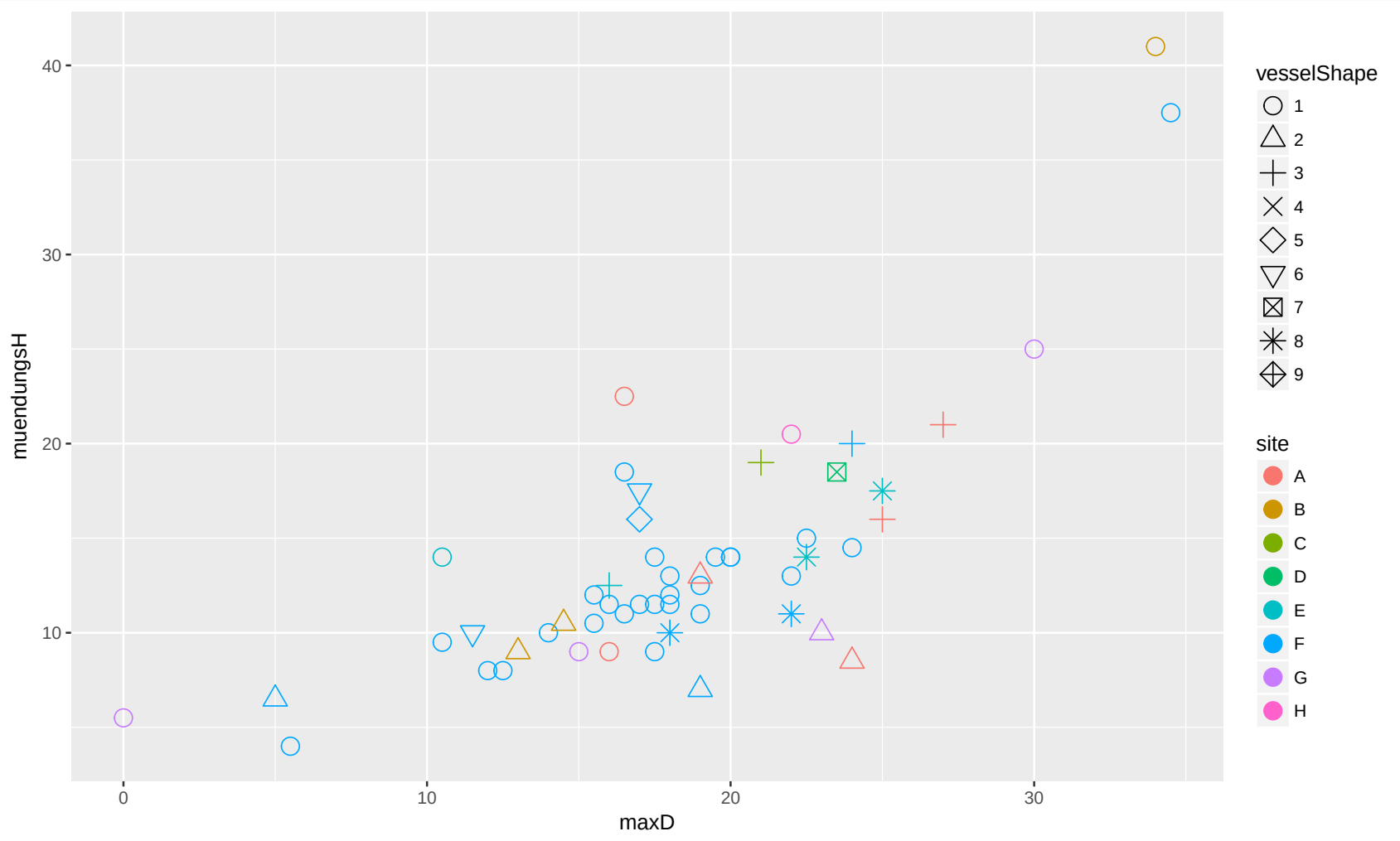
```
ggplot(df, aes(x = maxD, y = muendungsH, color = site, shape = vesselShape)) +
  geom_point(size = 4)
```



Anwendung 2: Scatterplot

manuelle Angabe der Symbole

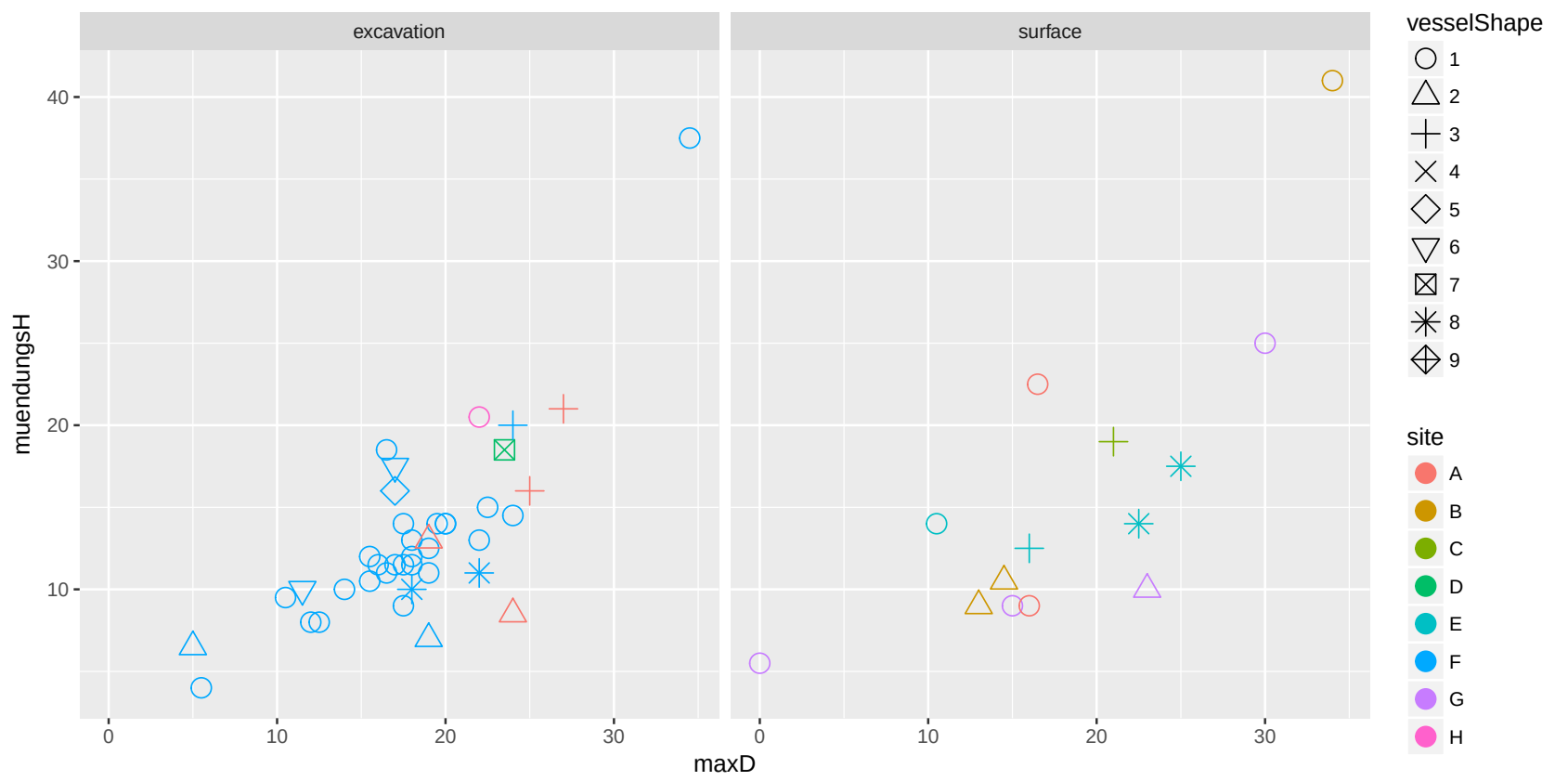
```
ggplot(df, aes(x = maxD, y = muendungsH, color = site, shape = vesselShape)) +
  geom_point(size = 4) +
  scale_shape_manual(values = 1:(1+length(unique(df$vesselShape))))
```



Anwendung 2: Scatterplot

Facettierung der Daten

```
ggplot(df, aes(x = maxD, y = muendungsH, color = site, shape = vesselShape)) +
  geom_point(size = 4) +
  scale_shape_manual(values = 1:(1+length(unique(df$vesselShape)))) +
  facet_wrap(~ feature_simple)
```



Anwendung 2: Scatterplot

Position der Legende & fertiger Plot

```
ggplot(df, aes(x = maxD, y = muendungsH, color = site, shape = vesselShape)) +
  geom_point(size = 4) +
  scale_shape_manual(values = 1:(1+length(unique(df$vesselShape)))) +
  facet_wrap(~ feature_simple) +
  theme(legend.direction ="horizontal",legend.position = "bottom")
```