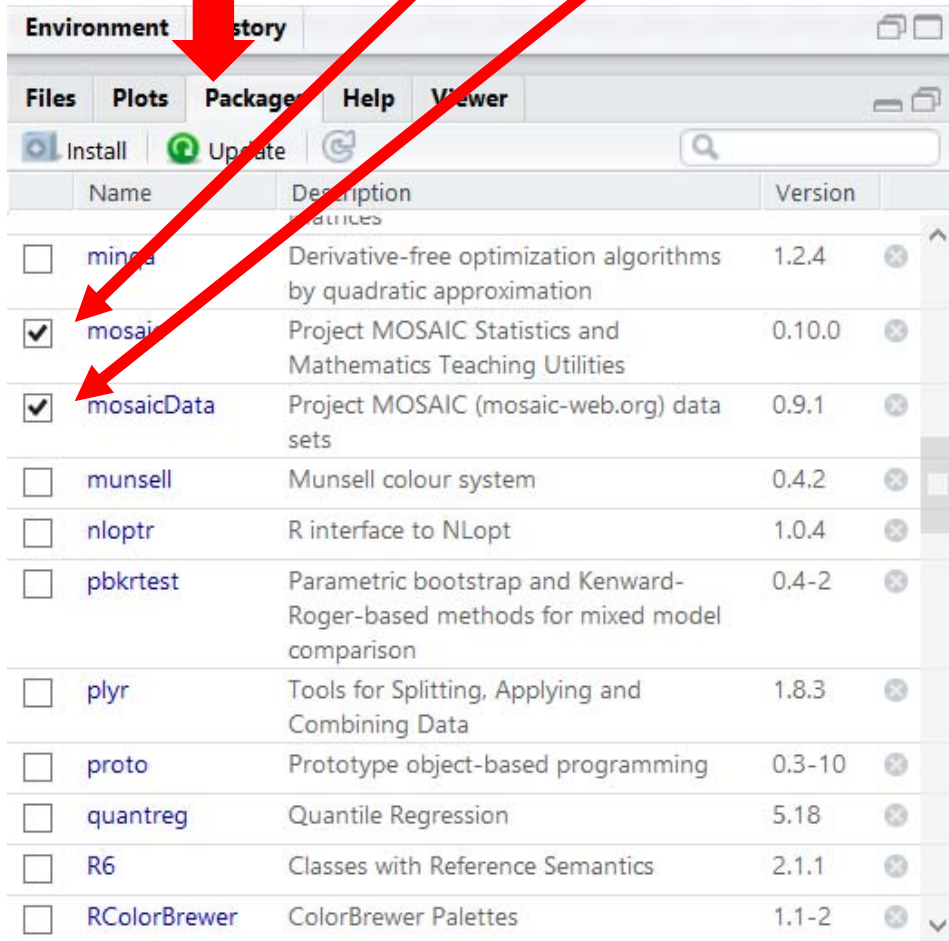


Using Mosaic in Section 5.5

First, make sure you have checked the “mosaic” and mosaicData” boxes in RStudio under the tab, “Packages”.



Let's use the data from CoolingWater within mosaic.

Let time = explanatory variable and temp = response variable.

- To make the scatter plot.

```
> plot(CoolingWater$time, CoolingWater$temp)
```

- To find the LSRL. *Do either command.*

```
> lm(temp~time,data=CoolingWater)
```

Call:

```
lm(formula = temp ~ time, data = CoolingWater)
```

Coefficients:

(Intercept)	time
64.2766	-0.2164

```
> lm(CoolingWater$temp~CoolingWater$time)
```

Call:

```
lm(formula = CoolingWater$temp ~ CoolingWater$time)
```

Coefficients:

(Intercept)	CoolingWater\$time
64.2766	-0.2164

- To find the correlation. *Do either command.*

```
> cor(time,temp,data=CoolingWater)
```

```
[1] -0.8820935
```

```
> cor(CoolingWater$time,CoolingWater$temp)
```

```
[1] -0.8820935
```

- To find the residuals. *Do either command.*

```
> resid(lm(temp~time,data=CoolingWater))
```

- To plot the explanatory and residuals.

```
> plot(CoolingWater$time,resid(lm(CoolingWater$temp~CoolingWater$time)))
```