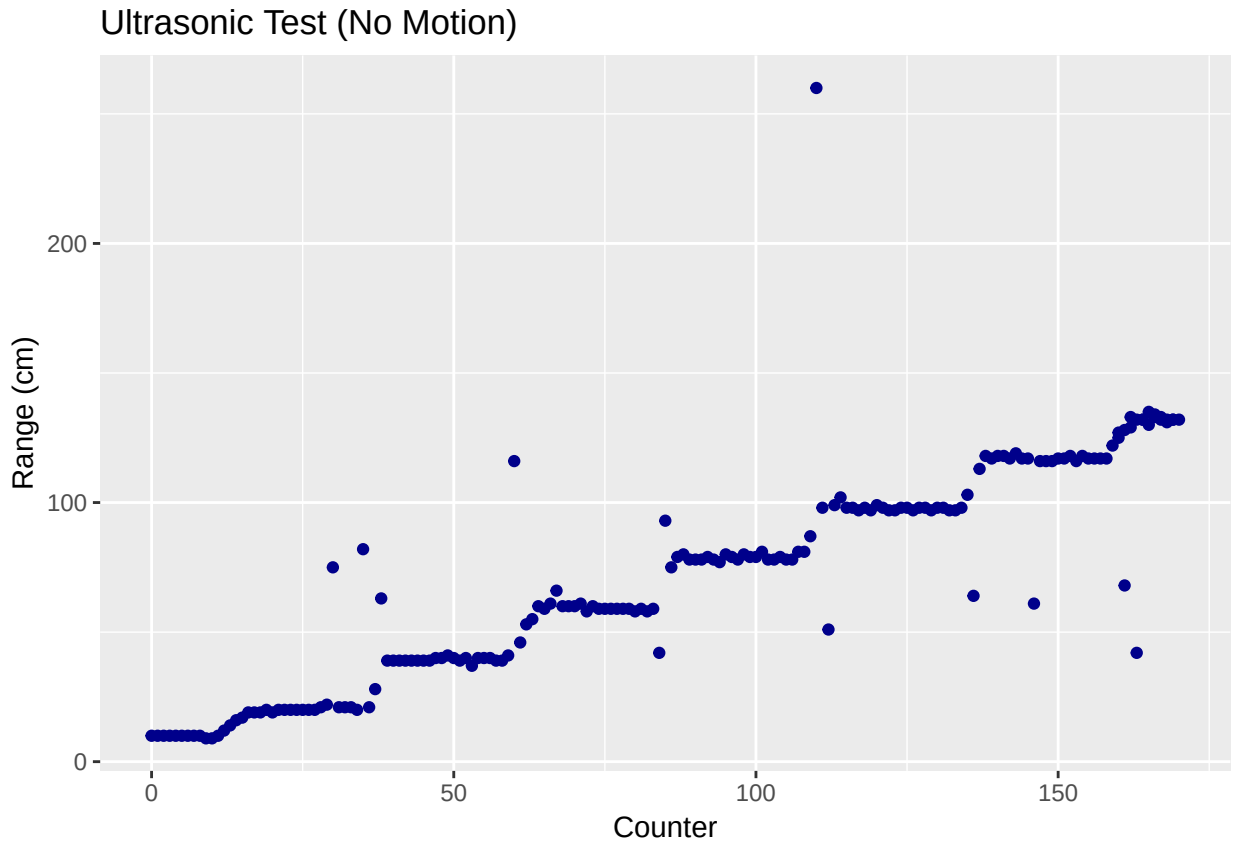
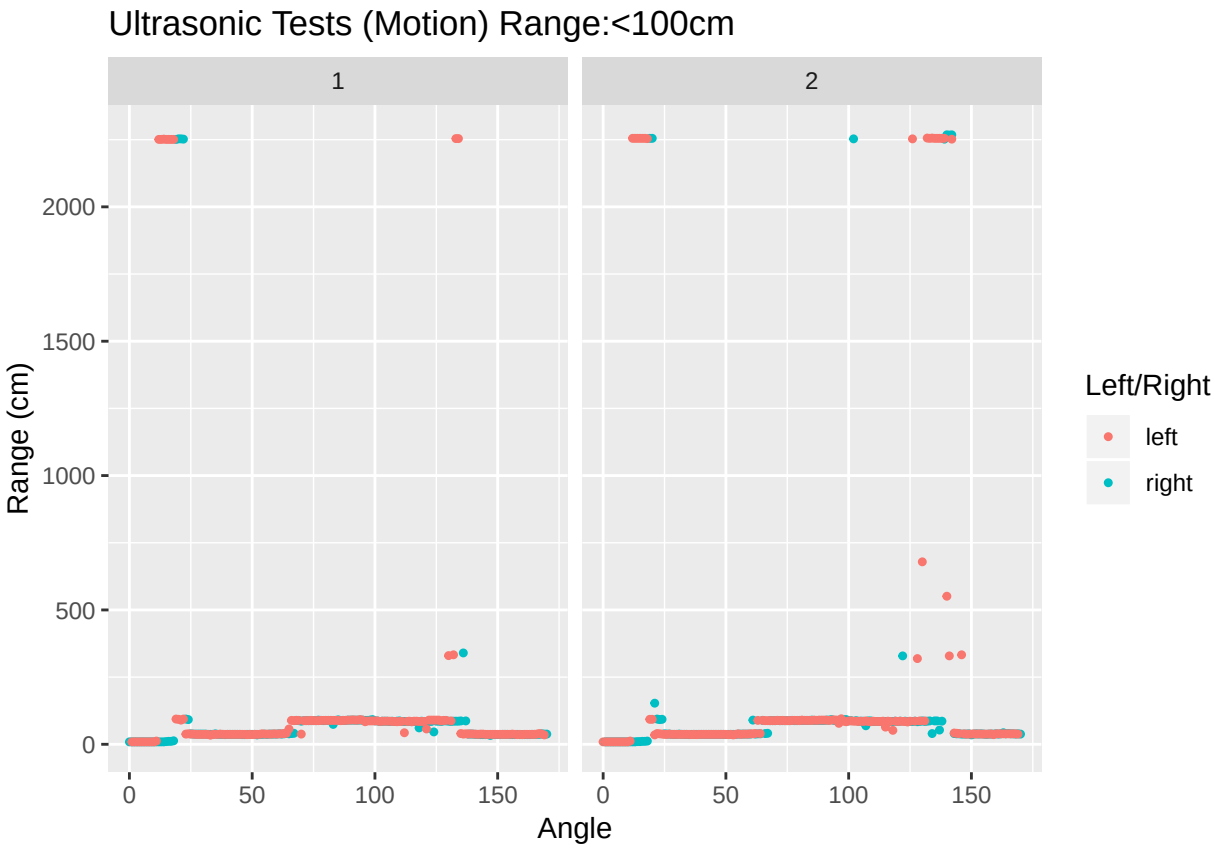
Radar

Including Plots

```
ggplot(data = noMotion, mapping = aes(x = noMotion$Angle, y = noMotion$Range)) +
 geom_point(color ="darkblue")+
 labs(title = "Ultrasonic Test (No Motion)")+
 labs(x="Counter")+
 labs(y="Range (cm)")
```



```
ggplot(data = withMotion, mapping = aes(x = withMotion$Angle, y = withMotion$Range,
 color = withMotion$LeftRight)) +
 geom_point(size = 0.9)+
 facet_grid(cols = vars(withMotion$Test))+
 labs(title = "Ultrasonic Tests (Motion) Range:<100cm")+
 labs(x="Angle")+
 labs(y="Range (cm)")+
 labs(color="Left/Right")
```



```
range100<-filter(withMotion, Range < 100)

ggplot(data = range100, mapping = aes(x = range100$Angle, y = range100$Range,
 color = range100$LeftRight)) +
 geom_point(size = 0.9)+
 facet_grid(cols = vars(range100$Test))+
 labs(title = "Ultrasonic Tests (Motion) Range:<100cm")+
 labs(x="Angle")+
 labs(y="Range (cm)")+
 labs(color="Left/Right")
```

```r
test1<-filter(withMotion, Range < 100 & Test == 1)


ggplot(data = test1, mapping = aes(x = test1$Angle, y = test1$Range,
 color = test1$LeftRight)) +
 geom_point(size = 0.9)+
 facet_grid(cols = vars(test1$LeftRight))+
 labs(title = "Ultrasonic Test 1 (Motion) Range:<100cm")+
 labs(x="Angle")+
 labs(y="Range (cm)")+
 labs(color="Left/Right")
```

```r
test2<-filter(withMotion, Range < 100 & Test == 2)

 ggplot(data = test2, mapping = aes(x = test2$Angle, y = test2$Range,color = test2$LeftRight)) +
  geom_point(size = 0.9)+
  facet_grid(cols = vars(test2$LeftRight))+
  labs(title = "Ultrasonic Test 2 (Motion) Range:<100cm")+
  labs(x="Angle")+
  labs(y="Range (cm)")+
  labs(color="Left/Right")
```