

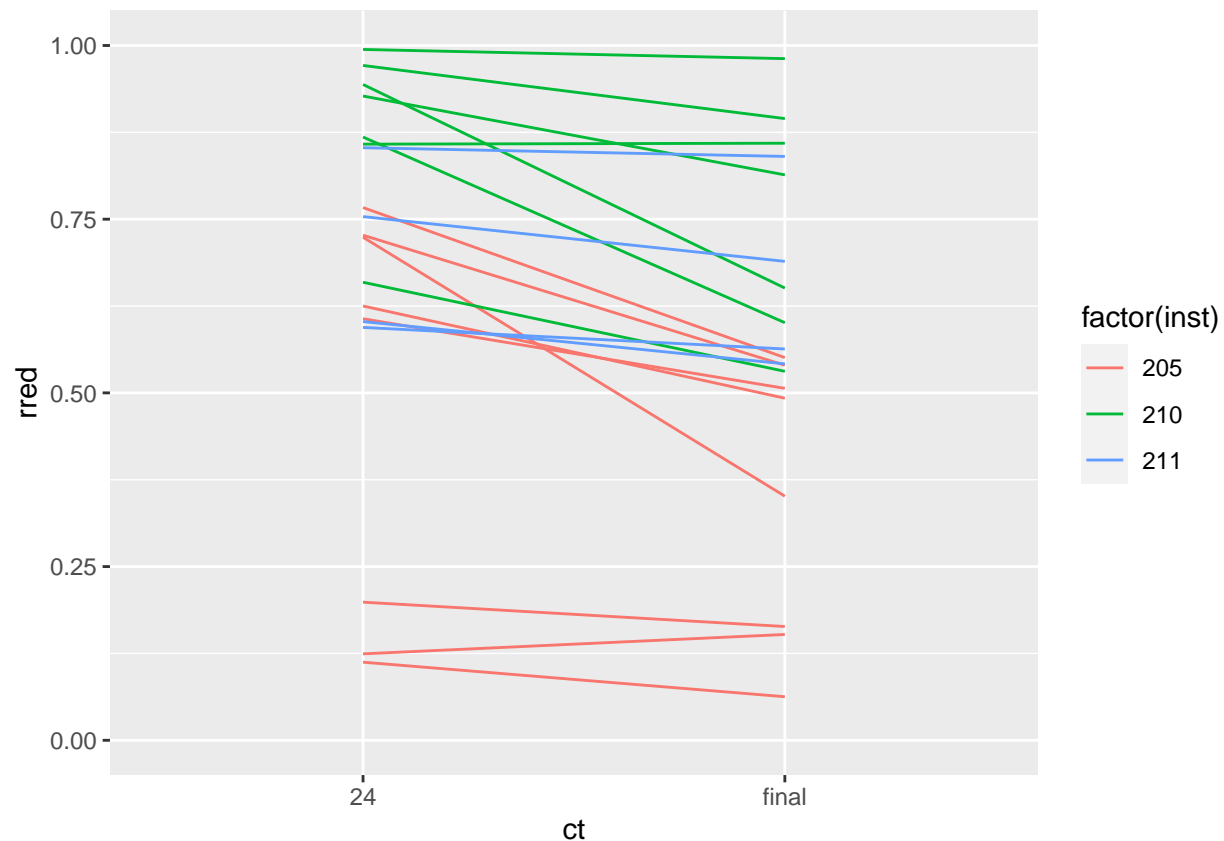
# Stats on change in acidification relative reduction

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```
dd <- dw3[ct %in% c('24', 'final') & rred > 0, ]

ggplot(dd, aes(ct, rred, colour = factor(inst), group = iexper)) +
  geom_line() +
  ylim(0, 1)
```



```
m1 <- lm(rred ~ iexper + ct, data = dd)
summary(m1)
```

```
##
## Call:
## lm(formula = rred ~ iexper + ct, data = dd)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.1304 -0.0382  0.0000  0.0382  0.1304
```

```
##
## Coefficients:
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.23720    0.05627   4.215 0.000521 ***
## iexper205 20D  -0.09372    0.07757  -1.208 0.242615
## iexper205 20E   0.47744    0.07757   6.155 8.22e-06 ***
## iexper205 20F   0.37532    0.07757   4.839 0.000132 ***
## iexper205 20G   0.45209    0.07757   5.828 1.61e-05 ***
## iexper205 20H   0.35639    0.07757   4.594 0.000225 ***
## iexper205 21A  -0.04293    0.07757  -0.553 0.586809
## iexper205 SyreN  0.37740    0.07757   4.865 0.000124 ***
## iexper210 IHF_13 0.41384    0.07757   5.335 4.52e-05 ***
## iexper210 IHF_6  0.80636    0.07757  10.395 4.90e-09 ***
## iexper210 IHF_7  0.67735    0.07757   8.732 6.89e-08 ***
## iexper210 WIND_10 0.61607    0.07757   7.942 2.72e-07 ***
## iexper210 WIND_4 0.75172    0.07757   9.691 1.44e-08 ***
## iexper210 WIND_6 0.55333    0.07757   7.133 1.20e-06 ***
## iexper210 WIND_8 0.68923    0.07757   8.885 5.33e-08 ***
## iexper211 B1    0.66530    0.07757   8.577 8.97e-08 ***
## iexper211 B2    0.54022    0.07757   6.964 1.66e-06 ***
## iexper211 W1    0.39742    0.07757   5.123 7.11e-05 ***
## iexper211 W2    0.39092    0.07757   5.040 8.52e-05 ***
## ctfinal        -0.11181    0.02517  -4.443 0.000314 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.07757 on 18 degrees of freedom
## Multiple R-squared:  0.9584, Adjusted R-squared:  0.9144
## F-statistic: 21.82 on 19 and 18 DF, p-value: 9.381e-09
```

```
summary.aov(m1)
```

```
##               Df Sum Sq Mean Sq F value    Pr(>F)
## iexper        18  2.3752  0.13196    21.93 1.01e-08 ***
## ct              1  0.1188  0.11877    19.74 0.000314 ***
## Residuals     18  0.1083  0.00602
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
confint(m1)
```

```
##               2.5 %      97.5 %
## (Intercept)    0.1189720  0.35542809
## iexper205 20D  -0.2566827  0.06924953
## iexper205 20E   0.3144724  0.64040465
## iexper205 20F   0.2123549  0.53828720
## iexper205 20G   0.2891189  0.61505114
## iexper205 20H   0.1934228  0.51935503
## iexper205 21A  -0.2058915  0.12004074
## iexper205 SyreN  0.2144364  0.54036867
## iexper210 IHF_13 0.2508739  0.57680613
## iexper210 IHF_6  0.6433920  0.96932426
## iexper210 IHF_7  0.5143816  0.84031392
## iexper210 WIND_10 0.4531088  0.77904103
## iexper210 WIND_4 0.5887552  0.91468749
```

## iexper210 WIND_6	0.3903628	0.71629503
## iexper210 WIND_8	0.5262600	0.85219230
## iexper211 B1	0.5023331	0.82826532
## iexper211 B2	0.3772580	0.70319023
## iexper211 W1	0.2344521	0.56038434
## iexper211 W2	0.2279541	0.55388633
## ctfinal	-0.1646871	-0.05894072