Stats on change in acidification relative reduction

Sasha D. Hafner

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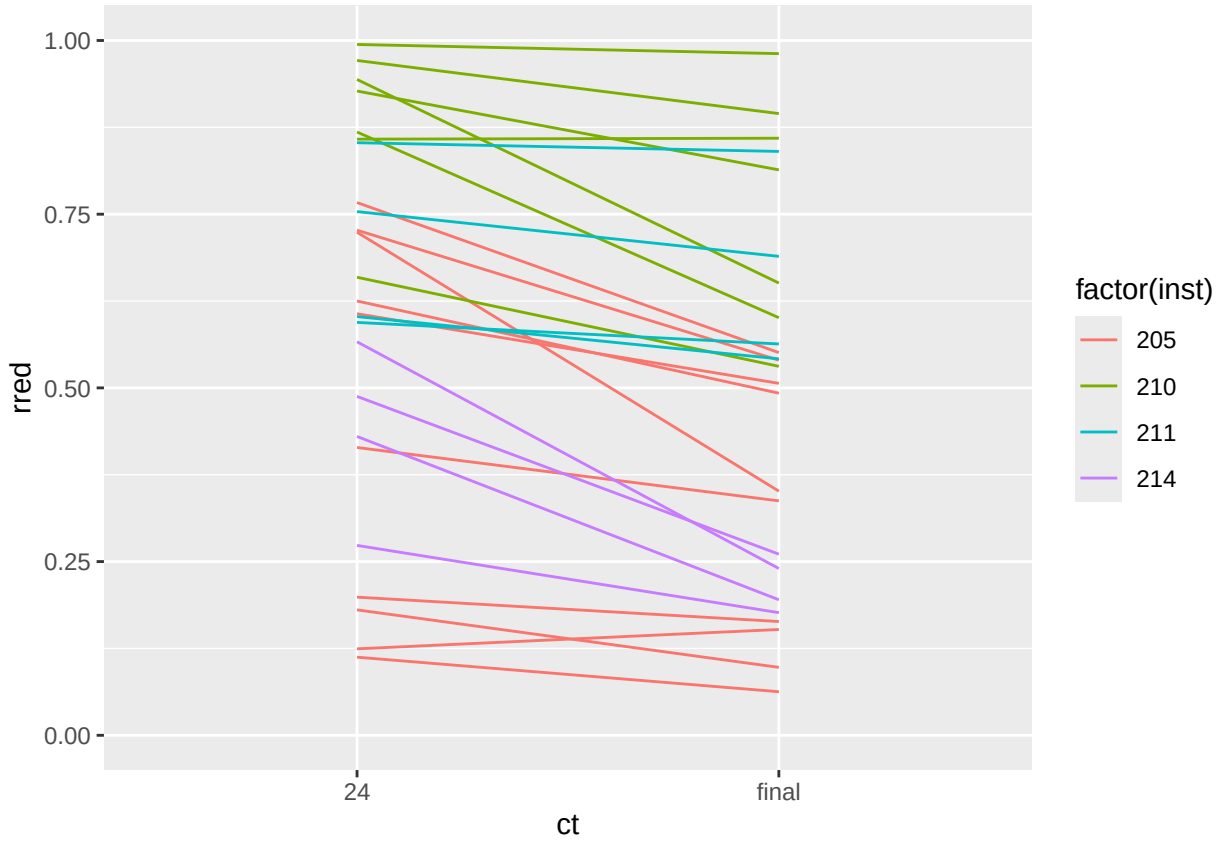
```
dd <- dw3[ct %in% c('24', 'final') & rred > 0, ]

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
## -0.12292 -0.04308  0.00000  0.04308  0.12292
```

```
##
## Coefficients:
##                     Estimate Std. Error t value Pr(>|t|)
## (Intercept)          0.24468    0.05584   4.382 0.000200 ***
## iexper205 20D       -0.09372    0.07743  -1.210 0.237943
## iexper205 20E        0.47744    0.07743   6.166 2.27e-06 ***
## iexper205 20F        0.37532    0.07743   4.847 6.13e-05 ***
## iexper205 20G        0.45209    0.07743   5.839 5.07e-06 ***
## iexper205 20H        0.35639    0.07743   4.603 0.000114 ***
## iexper205 21A       -0.04293    0.07743  -0.554 0.584458
## iexper205 23C        0.19452    0.07743   2.512 0.019131 *
## iexper205 23D       -0.04217    0.07743  -0.545 0.591009
## iexper205 SyreN      0.37740    0.07743   4.874 5.72e-05 ***
## iexper210 IHF_13     0.41384    0.07743   5.345 1.74e-05 ***
## iexper210 IHF_6      0.80636    0.07743  10.414 2.21e-10 ***
## iexper210 IHF_7      0.67735    0.07743   8.748 6.26e-09 ***
## iexper210 WIND_10    0.61607    0.07743   7.956 3.48e-08 ***
## iexper210 WIND_4     0.75172    0.07743   9.708 8.74e-10 ***
## iexper210 WIND_6     0.55333    0.07743   7.146 2.19e-07 ***
## iexper210 WIND_8     0.68923    0.07743   8.901 4.54e-09 ***
## iexper211 B1         0.66530    0.07743   8.592 8.72e-09 ***
## iexper211 B2         0.54022    0.07743   6.977 3.25e-07 ***
## iexper211 W1         0.39742    0.07743   5.133 2.97e-05 ***
## iexper211 W2         0.39092    0.07743   5.049 3.68e-05 ***
## iexper214 G2014-18b  0.13127    0.07743   1.695 0.102965
## iexper214 G2014-19   0.22189    0.07743   2.866 0.008520 **
## iexper214 G2014-23a  0.19291    0.07743   2.491 0.020037 *
## iexper214 G2014-23b  0.04360    0.07743   0.563 0.578611
## ctfinal             -0.12677    0.02190  -5.788 5.75e-06 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.07743 on 24 degrees of freedom
## Multiple R-squared:  0.9617, Adjusted R-squared:  0.9217
## F-statistic: 24.08 on 25 and 24 DF,  p-value: 1.283e-11
```

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

```
##             Df Sum Sq Mean Sq F value   Pr(>F)
## iexper      24  3.408  0.1420   23.68 1.74e-11 ***
## ct           1  0.201  0.2009   33.50 5.75e-06 ***
## Residuals   24  0.144  0.0060
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
confint(m1)
```

```
##                          2.5 %      97.5 %
## (Intercept)          0.12943538  0.35991762
## iexper205 20D       -0.25352728  0.06609407
## iexper205 20E        0.31762784  0.63724919
## iexper205 20F        0.21551039  0.53513174
## iexper205 20G        0.29227433  0.61189568
## iexper205 20H        0.19657821  0.51619957
## iexper205 21A       -0.20273607  0.11688528
```

```
## iexper205 23C        0.03470620  0.35432755
## iexper205 23D       -0.20198490  0.11763646
## iexper205 SyreN      0.21759186  0.53721321
## iexper210 IHF_13     0.25402932  0.57365067
## iexper210 IHF_6      0.64654745  0.96616880
## iexper210 IHF_7      0.51753711  0.83715846
## iexper210 WIND_10    0.45626421  0.77588557
## iexper210 WIND_4     0.59191067  0.91153203
## iexper210 WIND_6     0.39351822  0.71313957
## iexper210 WIND_8     0.52941549  0.84903684
## iexper211 B1         0.50548851  0.82510986
## iexper211 B2         0.38041342  0.70003477
## iexper211 W1         0.23760753  0.55722889
## iexper211 W2         0.23110952  0.55073088
## iexper214 G2014-18b -0.02854474  0.29107661
## iexper214 G2014-19   0.06208055  0.38170190
## iexper214 G2014-23a  0.03309647  0.35271783
## iexper214 G2014-23b -0.11621141  0.20340994
## ctfinal             -0.17196814 -0.08156557
```