## Check ALFAM predictions

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## Determine parameter values for model

## [1] 0.0892778

```
acid.pars
##
          int.f0
                       int.r1
                                   int.r2
                                             int.r3
                                                     man.ph.r1
                                                                  man.ph.r3 man.source.pig.f0 country
## 1
       1.0196004 -1.393616379 -0.7063251 -3.133849
                                                     0.6651733 -0.03678573
                                                                                  0.547298565
      -0.8196223 -1.062579227 -1.9605953 -3.477660
                                                                                                    DK
                                                     0.6784625
                                                                 1.07282631
                                                                                  0.010649964
       2.2268319 -0.056757198 -0.9641707 -4.167802
                                                     0.5520191
                                                                -0.11299219
                                                                                  -2.250455854
                                                                                                    NL
##
      -0.8195999 -0.240521155 -1.3352308 -3.319355
                                                     0.9771958
                                                                                                    NL
                                                                 0.37857158
                                                                                  -0.015538521
## 5
       0.6086105 -0.242442769 -0.7359782 -3.623038
                                                     0.4999204
                                                                 0.56572114
                                                                                  -1.183012945
                                                                                                    NL
## 6
       0.1220507 -0.704443278 -1.8756901 -3.100777
                                                     0.7616286
                                                                                  -0.572500509
                                                                                                    NL 210
                                                                 0.13162223
       0.5457575 -0.244894519 -4.0232442 -2.441320
                                                                                  0.126003570
                                                     1.8137797
                                                                 0.16618375
       0.2130891 -0.626043389 -1.3369312 -2.616785
## 8
                                                     0.6089017
                                                                 0.07814877
                                                                                  -1.258405015
                                                                                                    NL
       0.5003897 -0.813830103 -2.9571641 -2.401078
                                                     0.6626218
                                                                 0.71097421
                                                                                  -0.094348845
                                                                                                    NL
                                                                                                    DK
## 10 -0.6644718 -0.869134295 -0.1869612 -3.491319
                                                     0.6084847
                                                                 0.30971386
                                                                                  -0.679632592
## 11 -0.5702453 -1.450941321 -0.8461731 -3.084432
                                                     0.3821639
                                                                 0.23933598
                                                                                  0.064200824
                                                                                                    DK
## 12 -0.6187791 -1.258494747 -0.0541669 -3.181493 -0.1297708 -0.09111272
                                                                                  0.009600826
                                                                                                    DK
       0.4879648 -0.003564062
                               0.8257819 -2.942251
                                                     0.2422242
                                                                 0.19495069
                                                                                  0.162864101
                                                                                                    DK
  14 -0.6656878 -0.322364673 -0.8348979 -2.017325
                                                     0.9102287
                                                                 2.25300782
                                                                                  -2.749275550
                                                                                                    DK
## 15 -0.3355142 -0.977413728 -0.3171014 -3.044557
                                                     1.2381943
                                                                 0.42780694
                                                                                  -0.995921250
                                                                                                    DK
## 16 -0.6636043 -1.374527145 -0.2487543 -3.395602
                                                     0.6039320
                                                                 0.35496615
                                                                                  -0.453129708
                                                                                                    DK
## 17 -0.5655448 -1.797257222 -0.7202709 -3.728464
                                                     0.1368254 -0.02001328
                                                                                                    DK
                                                                                  0.356655886
       0.3403686 - 1.397177730 - 0.1544347 - 3.367932
                                                     0.6648668
                                                                 0.08394464
                                                                                  -0.332276585
                                                                                                    DK
## 19 -0.5937786 -1.442362900 -0.9129302 -3.191580
                                                                                  -0.330626816
                                                                                                    DK
                                                     0.7913245
                                                                 0.16854843
## 20 -5.8928450 -1.135086127 -1.0952883 -2.908662
                                                     1.1536085
                                                                 0.16374955
                                                                                  5.586319703
                                                                                                    DK
## 21 0.1025777 -1.042061594 -1.7413512 -3.424776
                                                                                                    DK
                                                     0.5418708
                                                                 0.27931625
                                                                                  0.166528026
## 22 -0.6389390 -1.357045901 -0.8907651 -3.044802
                                                     0.7039975
                                                                 0.23819002
                                                                                  -0.221176846
                                                                                                    DK
## 23 -1.2100039 -0.894588475 -2.9434338 -2.813623
                                                     0.8192893
                                                                 1.21763666
                                                                                  1.100484906
                                                                                                    DK
median(acid.pars$man.ph.r1)
## [1] 0.6648668
median(acid.pars$man.ph.r3)
## [1] 0.23819
median(acid.pars$man.ph.r1) - sd(acid.pars$man.ph.r1)/sqrt(nrow(acid.pars)) * 1.356
## [1] 0.5551151
median(acid.pars$man.ph.r3) - sd(acid.pars$man.ph.r3)/sqrt(nrow(acid.pars)) * 1.356
```

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```
DK only (so only field acidification)
dd <- subset(acid.pars, country == 'DK')</pre>
dd
##
          int.f0
                       int.r1
                                   int.r2
                                             int.r3
                                                     man.ph.r1
                                                                  man.ph.r3 man.source.pig.f0 country
## 1
       1.0196004 -1.393616379 -0.7063251 -3.133849
                                                     0.6651733 -0.03678573
                                                                                  0.547298565
                                                                                                    DK 205
## 2 -0.8196223 -1.062579227 -1.9605953 -3.477660
                                                     0.6784625
                                                                                  0.010649964
                                                                                                    DK 205
                                                                 1.07282631
## 10 -0.6644718 -0.869134295 -0.1869612 -3.491319
                                                     0.6084847
                                                                                  -0.679632592
                                                                                                    DK
                                                                 0.30971386
## 11 -0.5702453 -1.450941321 -0.8461731 -3.084432
                                                     0.3821639
                                                                 0.23933598
                                                                                  0.064200824
                                                                                                    DK
## 12 -0.6187791 -1.258494747 -0.0541669 -3.181493 -0.1297708 -0.09111272
                                                                                                    DK
                                                                                  0.009600826
## 13 0.4879648 -0.003564062 0.8257819 -2.942251
                                                     0.2422242
                                                                                                    DK
                                                                 0.19495069
                                                                                  0.162864101
## 14 -0.6656878 -0.322364673 -0.8348979 -2.017325
                                                     0.9102287
                                                                 2.25300782
                                                                                  -2.749275550
                                                                                                    DK
## 15 -0.3355142 -0.977413728 -0.3171014 -3.044557
                                                     1.2381943
                                                                0.42780694
                                                                                  -0.995921250
                                                                                                    DK
## 16 -0.6636043 -1.374527145 -0.2487543 -3.395602
                                                     0.6039320
                                                                 0.35496615
                                                                                  -0.453129708
                                                                                                    DK
## 17 -0.5655448 -1.797257222 -0.7202709 -3.728464
                                                                                                    DK
                                                     0.1368254 -0.02001328
                                                                                  0.356655886
       0.3403686 - 1.397177730 - 0.1544347 - 3.367932
                                                     0.6648668
                                                                 0.08394464
                                                                                  -0.332276585
                                                                                                    DK
                                                                                                    DK
## 19 -0.5937786 -1.442362900 -0.9129302 -3.191580
                                                     0.7913245
                                                                 0.16854843
                                                                                  -0.330626816
                                                                                  5.586319703
## 20 -5.8928450 -1.135086127 -1.0952883 -2.908662
                                                                                                    DK
                                                     1.1536085
                                                                 0.16374955
## 21 0.1025777 -1.042061594 -1.7413512 -3.424776
                                                     0.5418708
                                                                 0.27931625
                                                                                  0.166528026
                                                                                                    DK
## 22 -0.6389390 -1.357045901 -0.8907651 -3.044802
                                                     0.7039975
                                                                 0.23819002
                                                                                  -0.221176846
                                                                                                    DK
## 23 -1.2100039 -0.894588475 -2.9434338 -2.813623
                                                     0.8192893
                                                                1.21763666
                                                                                  1.100484906
                                                                                                    DK
median(dd$man.ph.r1)
## [1] 0.6650201
median(dd$man.ph.r3)
## [1] 0.238763
median(dd$man.ph.r1) - sd(dd$man.ph.r1)/sqrt(nrow(dd)) * 1.356
## [1] 0.5464313
median(dd$man.ph.r3) - sd(dd$man.ph.r3)/sqrt(nrow(dd)) * 1.356
## [1] 0.03387907
mean(dd$man.ph.r1)
## [1] 0.6256797
mean(dd$man.ph.r3)
## [1] 0.4285051
mean(dd\$man.ph.r1) - sd(dd\$man.ph.r1)/sqrt(nrow(dd)) * 1.356
## [1] 0.507091
mean(dd\$man.ph.r3) - sd(dd\$man.ph.r3)/sqrt(nrow(dd)) * 1.356
## [1] 0.2236212
```