

Predictions: The difference between the observations and the model expectation

- Population EPRED, PRED, CPREDI
- Individual IPRED, CIPRED, CIPREDI, EIPRED

## Residuals:

- Population NPDE, WRES, CWRESI
- Individual IWRES, ICWRESI, EIWRES

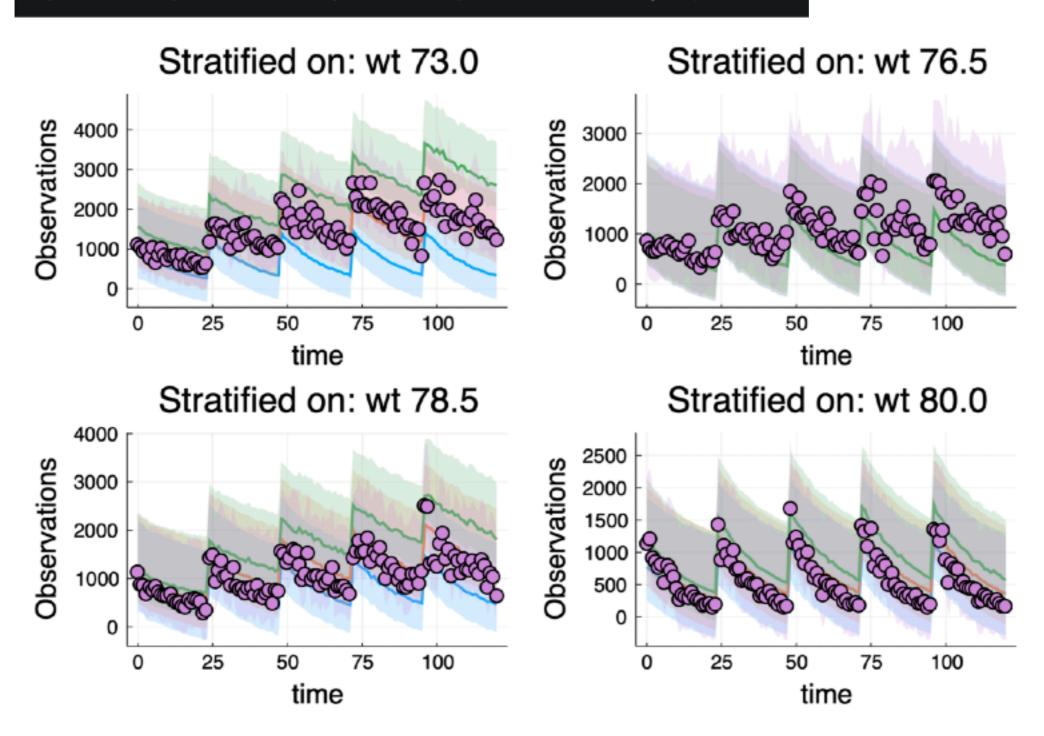
ηshrinkage, εshrinkage, AIC, BIC

```
julia> resout = DataFrame(inspect(res))
julia> first(resout, 6)
6×13 DataFrame
 Row
                time
                          isPM
                                wt
                                          pred
                                                   ipred
                                                             pred_approx | wres
                                                                                      iwres
                                                                                                 wres_approx
                                                                                                               ebe_1
                                                                                                                                       ebes_approx
        String | Float64
                          Int64 | Int64 |
                                         Float64
                                                   Float64
                                                             Pumas.FOCEI | Float64
                                                                                      Float64
                                                                                                  Pumas.FOCEI
                                                                                                              Float64
                                                                                                                           Float64
                                                                                                                                       Pumas.FOCEI
                                                             FOCEI()
                                                                                                  FOCEI()
                                                                                                                                      FOCEI()
                                          1326.95
                                                   1290.5
                                                                           0.0141867
                                                                                      0.164838
                                                                                                               -0.273173
                                                                                                                           0.0282462
                                                   1236.44
                                                             FOCEI()
                                                                          0.247655
                                                                                      0.414528
                                                                                                  FOCEI()
                                                                                                               -0.273173
                                                                                                                           0.0282462
                                                                                                                                       FOCEI()
                                                             FOCEI()
                                                                                                                           0.0282462
                                                                                                                                      FOCEI()
                                         1187.56
                                                   1184.65
                                                                          -1.44113
                                                                                      -1.53356
                                                                                                 FOCEI()
                                                                                                                                       FOCEI()
                                         1123.17 | 1135.03
                                                             FOCEI()
                                                                          -0.66784
                                                                                      -1.10145
                                                                                                 FOCEI()
                                                                                                               -0.273173
                                                                                                                          0.0282462
                                                             FOCEI()
                                                                                                 FOCEI()
                                                                                                                                       FOCEI()
                                         1004.17
                                                   1041.94
                                                             FOCEI()
                                                                          1.14917
                                                                                      0.521982
                                                                                                 FOCEI()
                                                                                                                          0.0282462
                                                                                                                                       FOCEI()
```

https://docs.pumas.ai/dev/analysis/diagnostics/#Model-Diagnostic-Functions-1



## julia> vpc(res,200;stratify\_on=[:wt]) |> plot



https://docs.pumas.ai/dev/analysis/diagnostics/#The-Visual-Predictive-Check-(vpc)-Function-1