Generating plots in the documentation (section Examples)

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02/02/2021

Objective

Generate the plots for the LaTeX user guide

Setup

loading libraries

Install package in development mode

```
dev_mode() # development mode

## Dev mode: ON
install.packages(pkgs=file.path(workDir,"npde_3.0.tar.gz"),repos=NULL)

## Installing package into 'C:/Users/Romai/OneDrive/Documents/R-dev'
## (as 'lib' is unspecified)

library(npde)
```

Run examples

• remove warnings (name.ipred empty, etc...) Romain

```
## Distribution of npde :
##
      nb of obs: 120
            mean= 0.0668 (SE= 0.095)
        variance= 1.074 (SE= 0.14)
##
        skewness= 0.511
##
        kurtosis= 0.2912
##
## Statistical tests
##
                           : 0.481
   t-test
   Fisher variance test
                          : 0.55
   SW test of normality : 0.00273 **
Slobal adjusted p-value : 0.00819 **
## Global adjusted p-value
                           : 0.00819 **
## ---
## Signif. codes: '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1
## -----
## -----
## Distribution of npde :
```

```
##
      nb of obs: 300
##
           mean = -0.06449 (SE= 0.057)
       variance= 0.9746 (SE= 0.08)
##
##
        skewness= -0.02427
        kurtosis= 0.004871
## -----
## Statistical tests
                        : 0.259
: 0.775
## t-test
##
   Fisher variance test
   SW test of normality
                         : 0.933
## Global adjusted p-value
                          : 0.776
## Signif. codes: '***' 0.001 '**' 0.05 '.' 0.1
## -----
## Distribution of npde :
      nb of obs: 169
           mean= 0.1433 (SE= 0.07)
##
       variance= 0.8186 (SE= 0.089)
##
##
       skewness= -0.03812
       kurtosis= -0.3733
## -----
##
## Statistical tests
   Fisher variance test : 0.041 *

SW test of normality : 0.697

Global care
## t-test
##
## SW test of normality
## Global adjusted p-value
                          : 0.123
## Signif. codes: '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1
## -----
## -----
## Distribution of npde :
   nb of obs: 300
##
##
      mean= 0.03101 (SE= 0.057)
##
       variance= 0.9715 (SE= 0.079 )
##
        skewness= -0.006498
##
       kurtosis= 0.8122
##
## Statistical tests
: 0.586

## Fisher variance test : 0.746

## SW test of normality : 0.00121 **

## Global adjusted p-value : 0.00364 **
## Signif. codes: '***' 0.001 '**' 0.05 '.' 0.1
## -----
## -----
## Distribution of npde :
    nb of obs: 300
##
```

```
mean= 0.03058 (SE= 0.062)
##
      variance= 1.164 (SE= 0.095 )
##
##
       skewness= 0.04433
##
       kurtosis= -0.05092
##
## Statistical tests
##
   t-test
                         : 0.624
                       : 0.0539 .
: 0.973
   Fisher variance test
   SW test of normality
## Global adjusted p-value
                         : 0.162
## Signif. codes: '***' 0.001 '**' 0.05 '.' 0.1
## -----
## -----
## Distribution of npde :
     nb of obs: 247
           mean= 0.03419 (SE= 0.06)
      variance= 0.8753 (SE= 0.079)
##
       skewness= -0.1149
##
       kurtosis= -0.0497
##
## Statistical tests
  : 0.566
Fisher variance test : 0.157
SW test of normality
## t-test
##
## Global adjusted p-value
                         : 0.471
## Signif. codes: '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1
## -----
## -----
## Distribution of npde :
##
     nb of obs: 247
           mean= 0.02928 (SE= 0.059)
##
##
      variance= 0.8549 (SE= 0.077)
##
       skewness= -0.07211
       kurtosis= -0.4172
## -----
## Statistical tests
  : 0.619
Fisher variance test : 0.096 .
SW test of normality : 0.368
Global adjusted
## Global adjusted p-value
                         : 0.288
## Signif. codes: '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1
## -----
```

Theophylline example

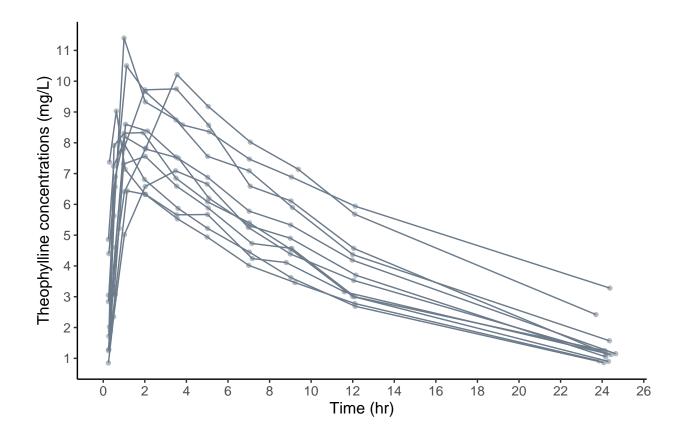
- solved data Romain
 - manquent les titres des axes, les axes

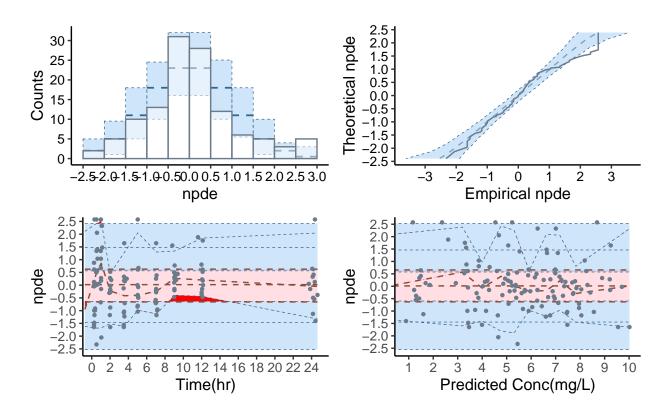
• VPC, scatterplot **Eco fait**

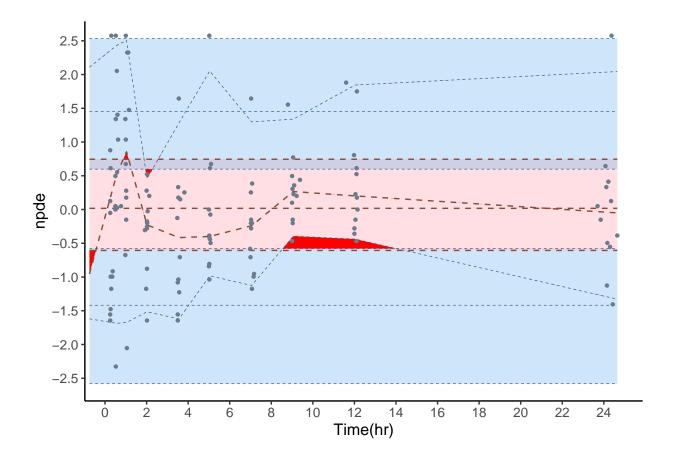
- modifié pour que le tracé des percentiles observés soit fait avec les linetype et size de lobs (pas des bandes), par contre la couleur matche celle de la bande de prédiction correspondante

Warning: Removed 12 rows containing missing values (geom_point).

Warning: Removed 12 row(s) containing missing values (geom_path).

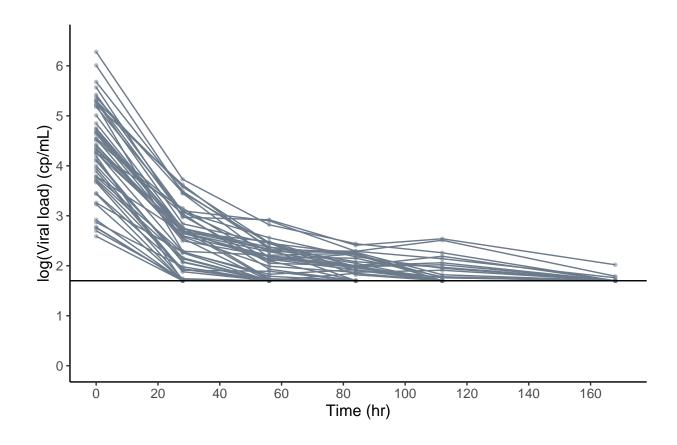


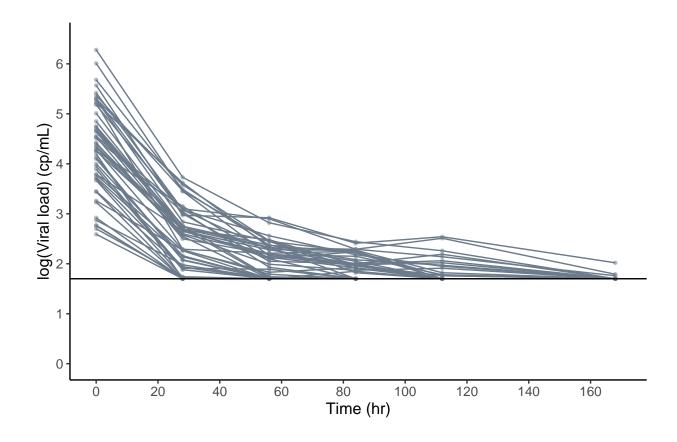


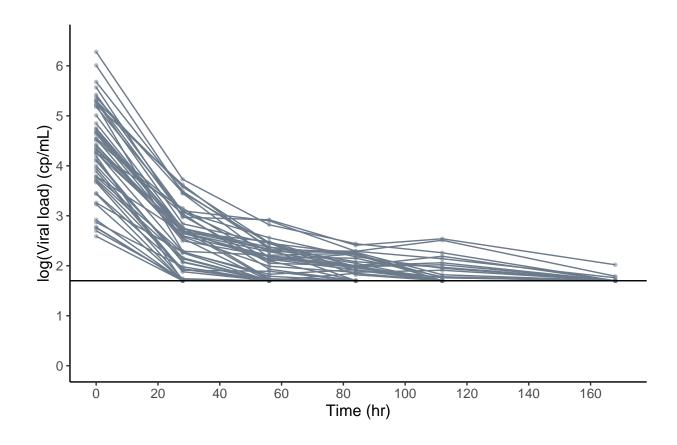


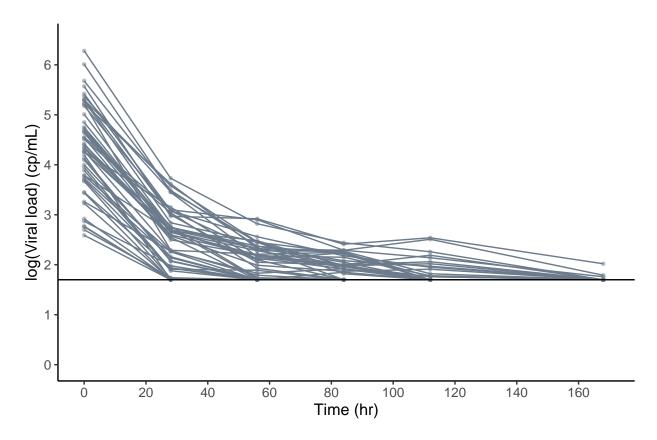
Viral load example

- data
 - mêmes problèmes que plus haut
 - **solved** line.loq doesn't work **Romain**
 - besoin de faire un waffle plot avec les 4 objets data, **Romain TODO** possible ? (sinon sauver 4 graphes)
 - Note Ce n'est plus possible maintenant, les fonctions plot renvoient des object p=NULL. Pas moyen après ça de les mettre dans une liste pour un grid.arrange.

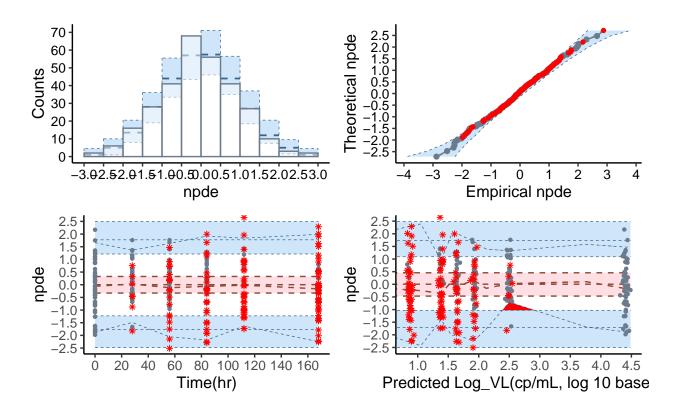


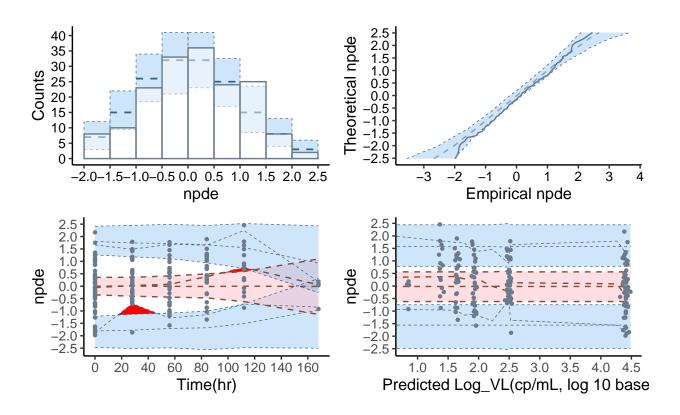


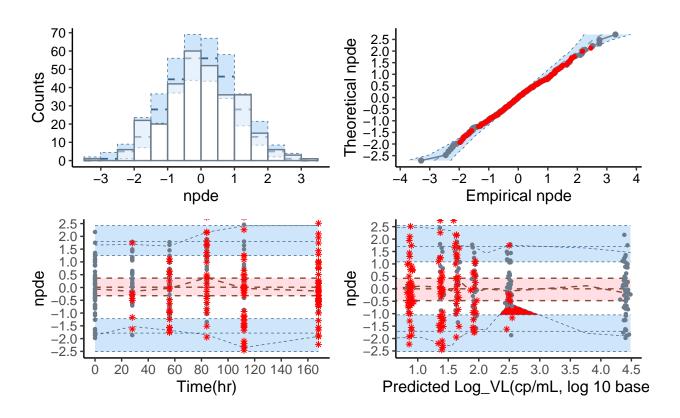


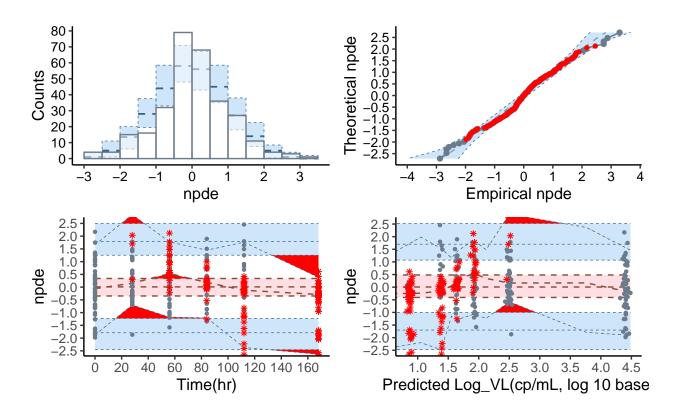


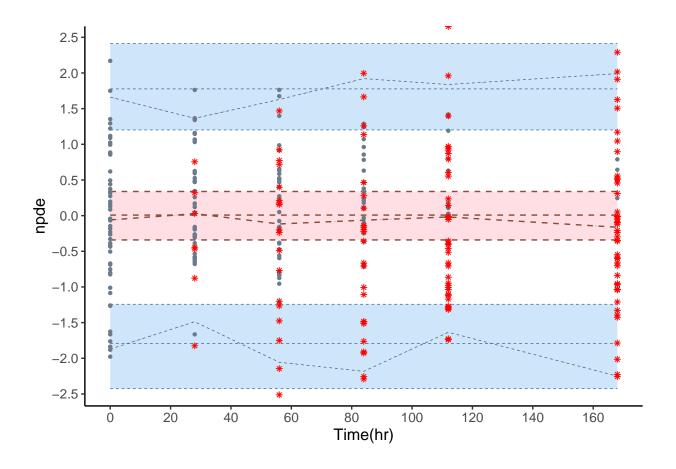
- $\bullet\,$ scatter plots and VPC
 - pb with VPC of x50 **Eco fait**
- possibilité d'utiliser un grid.arrange pour les 2 derniers graphes ? Romain

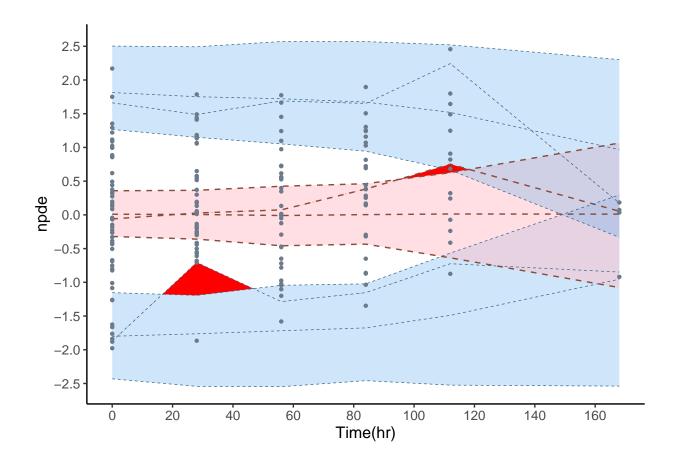


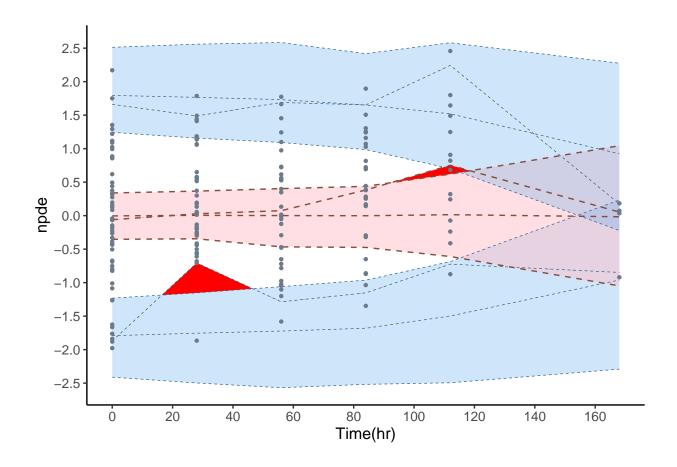


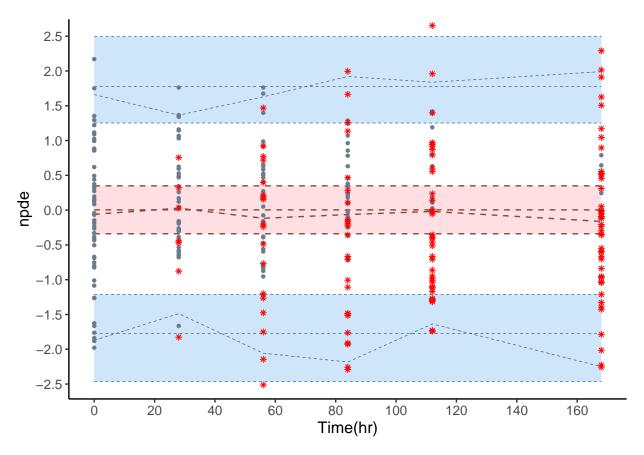


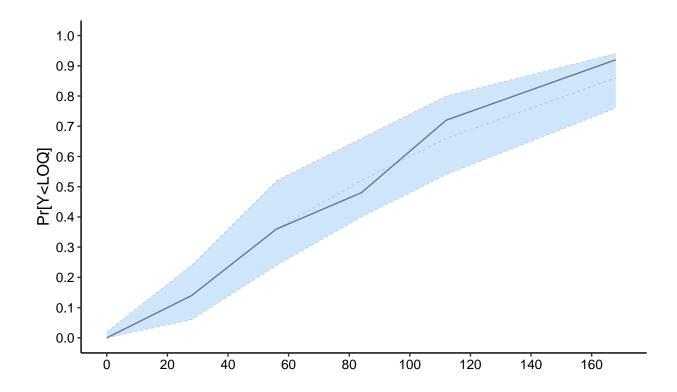


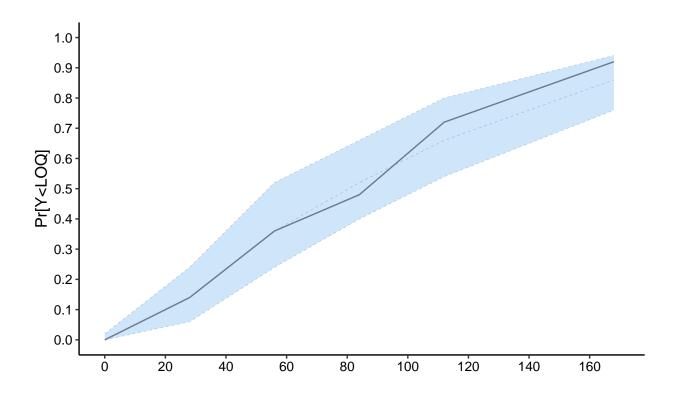






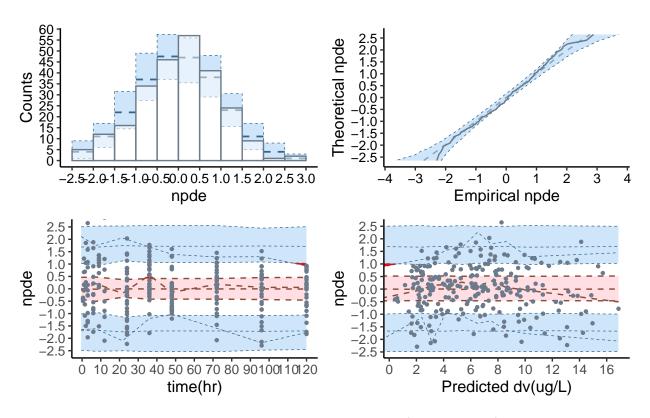




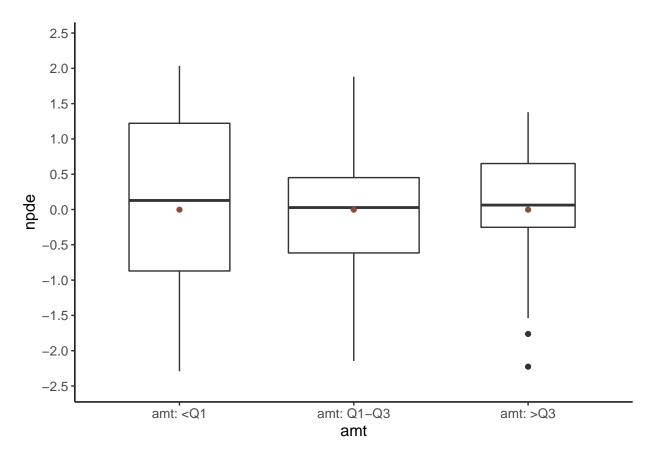


Warfarine

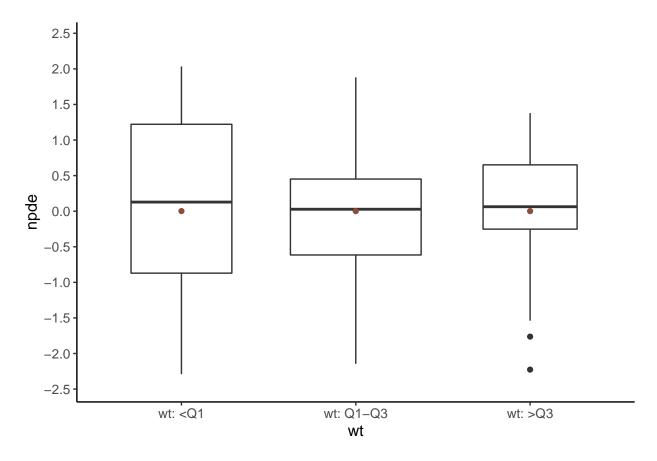
- TODO:
 - add to documentation
 - default plot with cov. scatter should be boxplot => check why not working



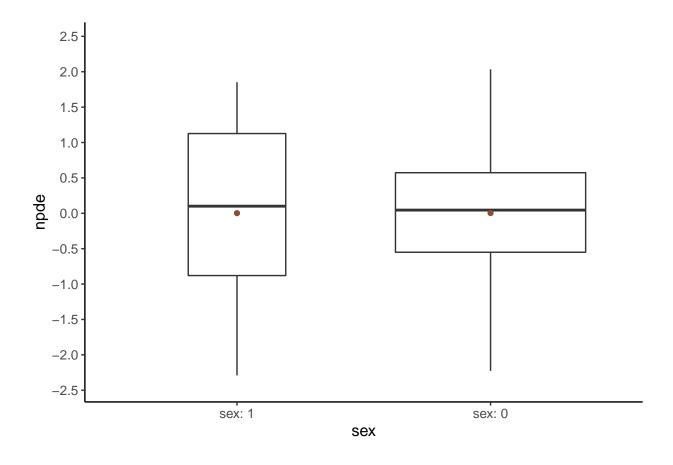
Warning: Removed 2 rows containing non-finite values (stat_boxplot).

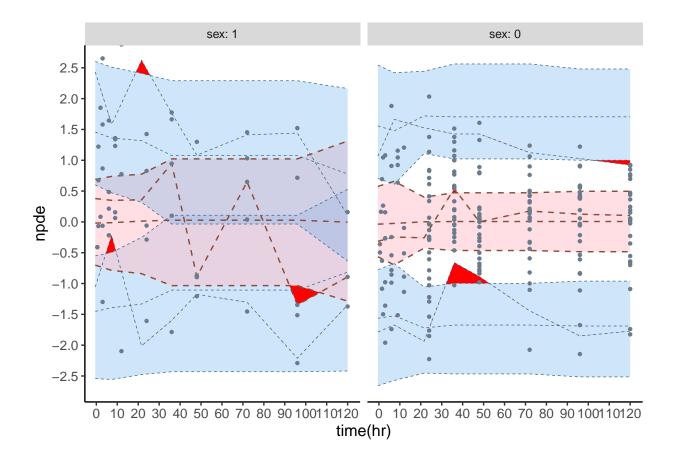


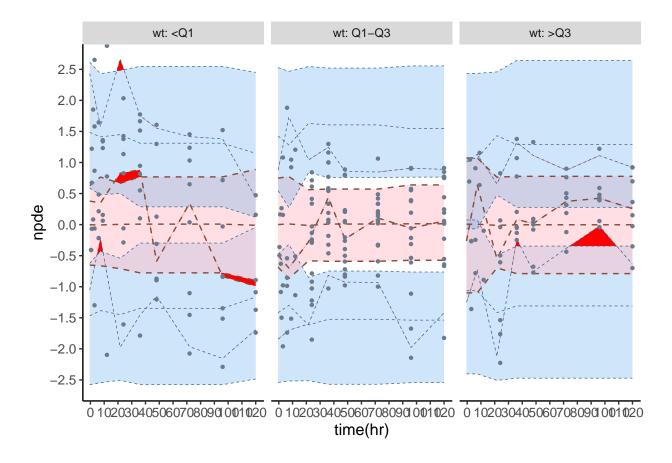
Warning: Removed 2 rows containing non-finite values (stat_boxplot).



Warning: Removed 2 rows containing non-finite values (stat_boxplot).







Remifentanil (data will be on website)

Remove from documentation ?

End of file, deactivating development mode

Dev mode: OFF