

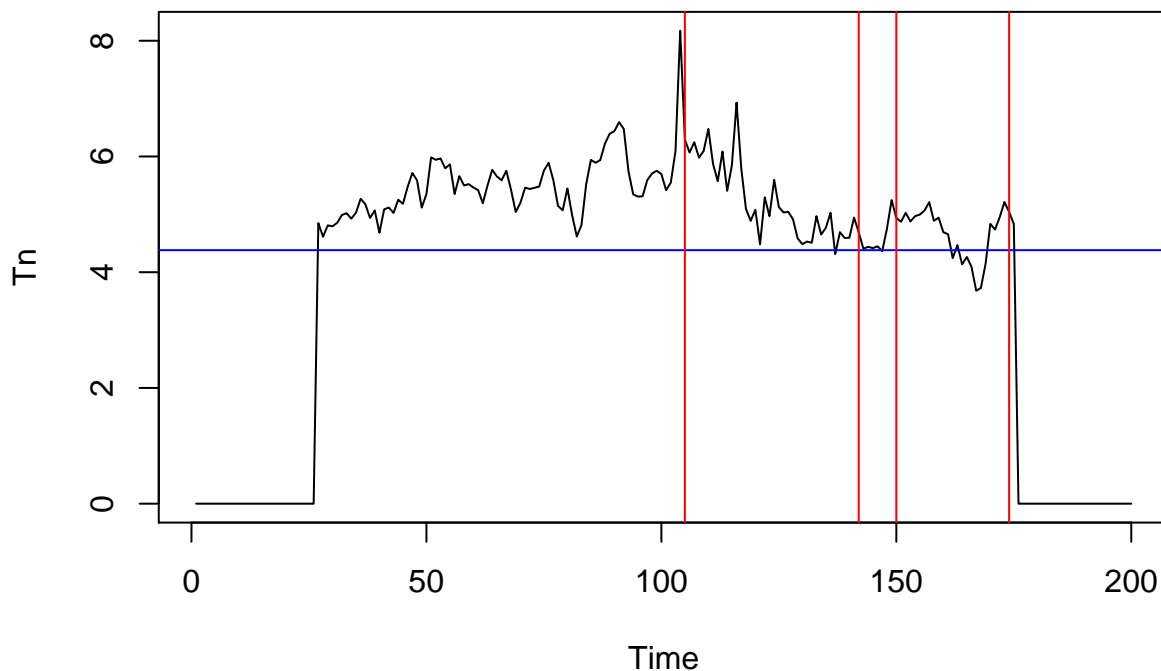
Quick start for nausea

```
library("nausea")
library("nowcasting")
```

This vignette is a quick start guide to nowcasting with `nausea`. For more detail, see the other vignette.

```
#load data
data(panel)
#fit factor model
factor_model_out <- factor_model(panel$panel )
# extract factors
factors <- factor_model_out$f.q
# change point analysis
mosumvar_out <- mosumvar_factor(panel$panel, p = 1, G= 24, nu = .1, method = "Score")
```

```
## Warning in dim_warning(n, G, d, p, "Score"): Not enough degrees of freedom for Score method: set G >
## Warning in dim_warning(n, G, d, p, "Score"): Bandwidth too small relative to model dimensions: set G
## Warning in dim_warning(n, G, d, p, "Score"): Bandwidth small relative to sample size: consider setti
## Warning in dim_warning(n, G, d, p, "Score"): Large dimensions: consider `option = univariate`
```



```
# change point based forecasting of factors, up to six steps ahead
pooled_forecast_out <- pooled_forecast(factors, cp = mosumvar_out$cps, p =1, window_size = 50, weights =
# forecast panel
panel_forecast <- predict(factor_model_out, pooled_forecast_out)
# nowcast GDP
lm_data <- data.frame(gdp = panel$gdp, factors)
```

```
gdp_lm <- lm(gdp ~ ., data = lm_data)
predict(gdp_lm, newdata = data.frame(gdp = NA, pooled_forecast_out))
```

```
##           1           2           3           4           5           6
## 0.02092588 0.02100691 0.02089365 0.02077910 0.02075106 0.02070493
```