Contrasting TLS-derived orthogonal stem profiles, in poplar plantations

Puletti N., Grotti M., Scotti R.

september 2018

Contents

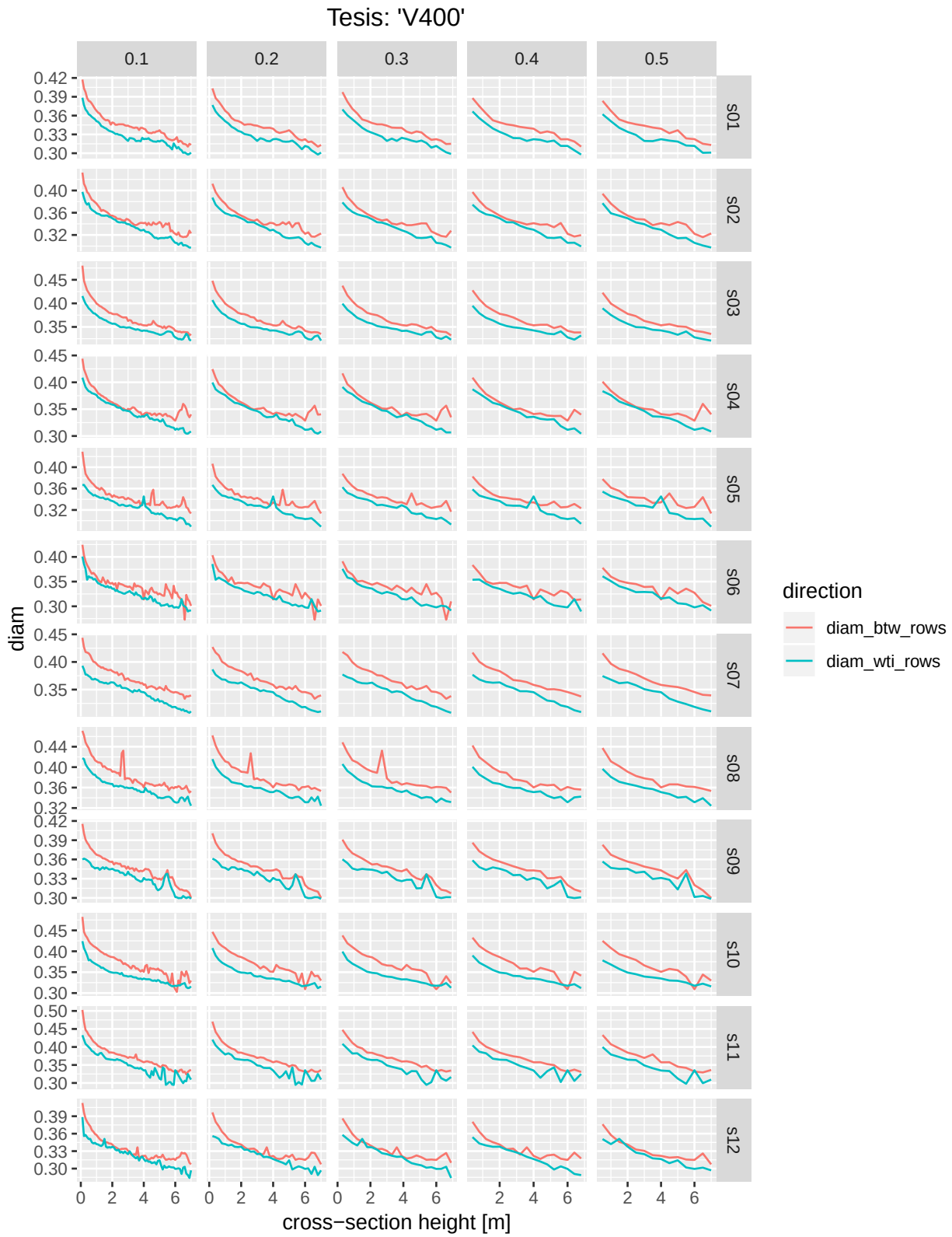
Plot all profiles

```
library(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.2.1 --

## v ggplot2 3.0.0     v purrr   0.2.5
## v tibble  1.4.2     v dplyr   0.7.6
## v tidyr   0.8.1     v stringr 1.3.1
## v readr   1.1.1     v forcats 0.3.0

## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

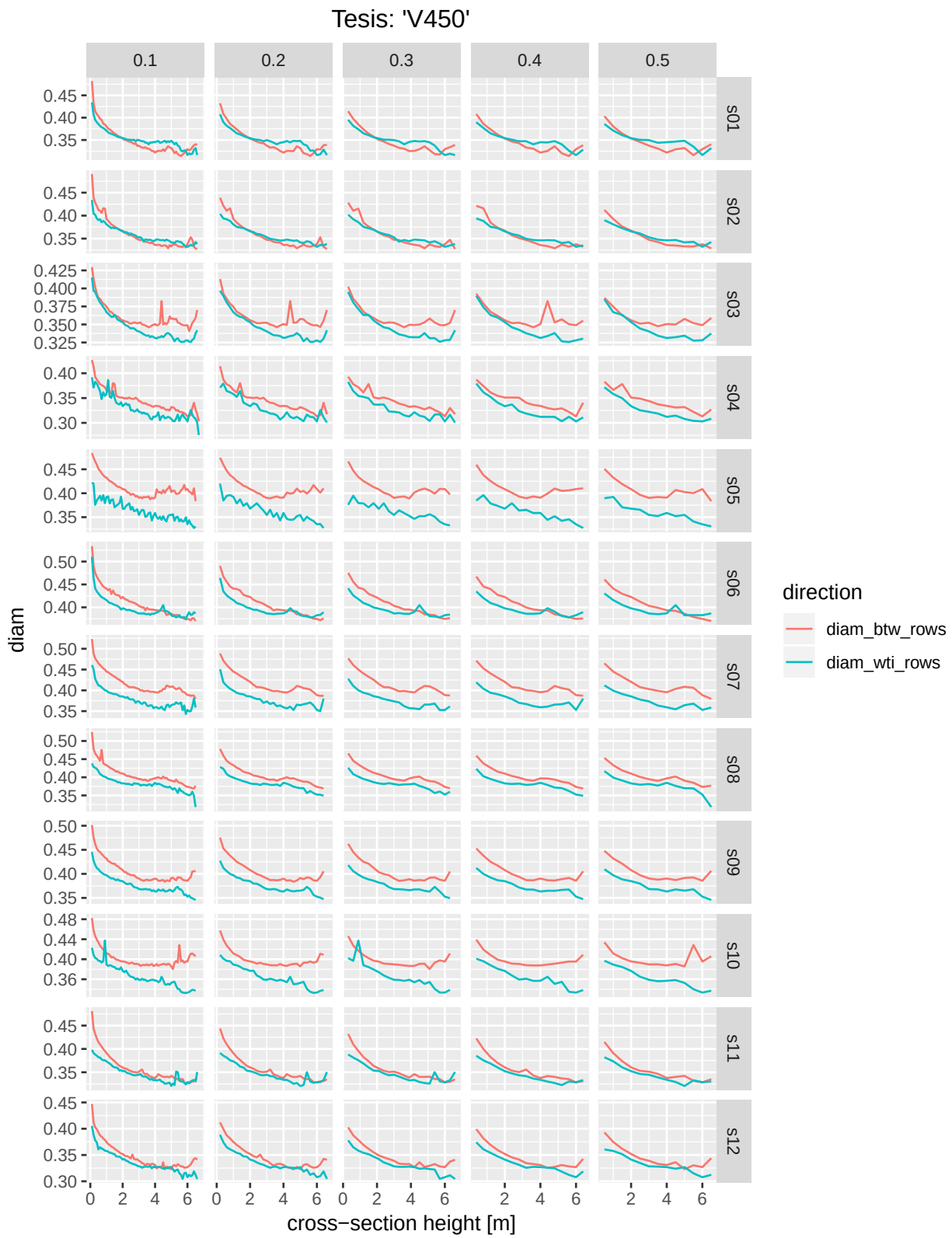
```
#TLSstem_vertical_crosssection
source("ReadData.R")

Diameters <- TLSderivedDiam %>%
  select( -ends_with("centro")) %>%
  filter(complete.cases(.)) %>%
  gather(direction, diam, starts_with("diam"))

gl <- Diameters %$%
  levels(tesi) %>%
  map(
    ~ Diameters %>%
      filter(tesi == .x) %>%
      ggplot(aes(slice, diam)) +
      xlab("cross-section height [m]") +
      geom_line(aes(color = direction)) +
      facet_grid(treid ~ length_toppo, scales = "free") +
      ggtitle(paste0("Tesis: '", .x, "'")) +
      theme(plot.title = element_text(hjust = 0.5))
  )
print(gl)
```

```
## [[1]]
```


Tesis: 'V400'
0.1
0.2
0.3
0.4
0.5
s01
s02
s03
s04
s05
s06
s07
s08
s09
s10
s11
s12
diam
cross−section height [m]
direction
diam_btw_rows
diam_wti_rows

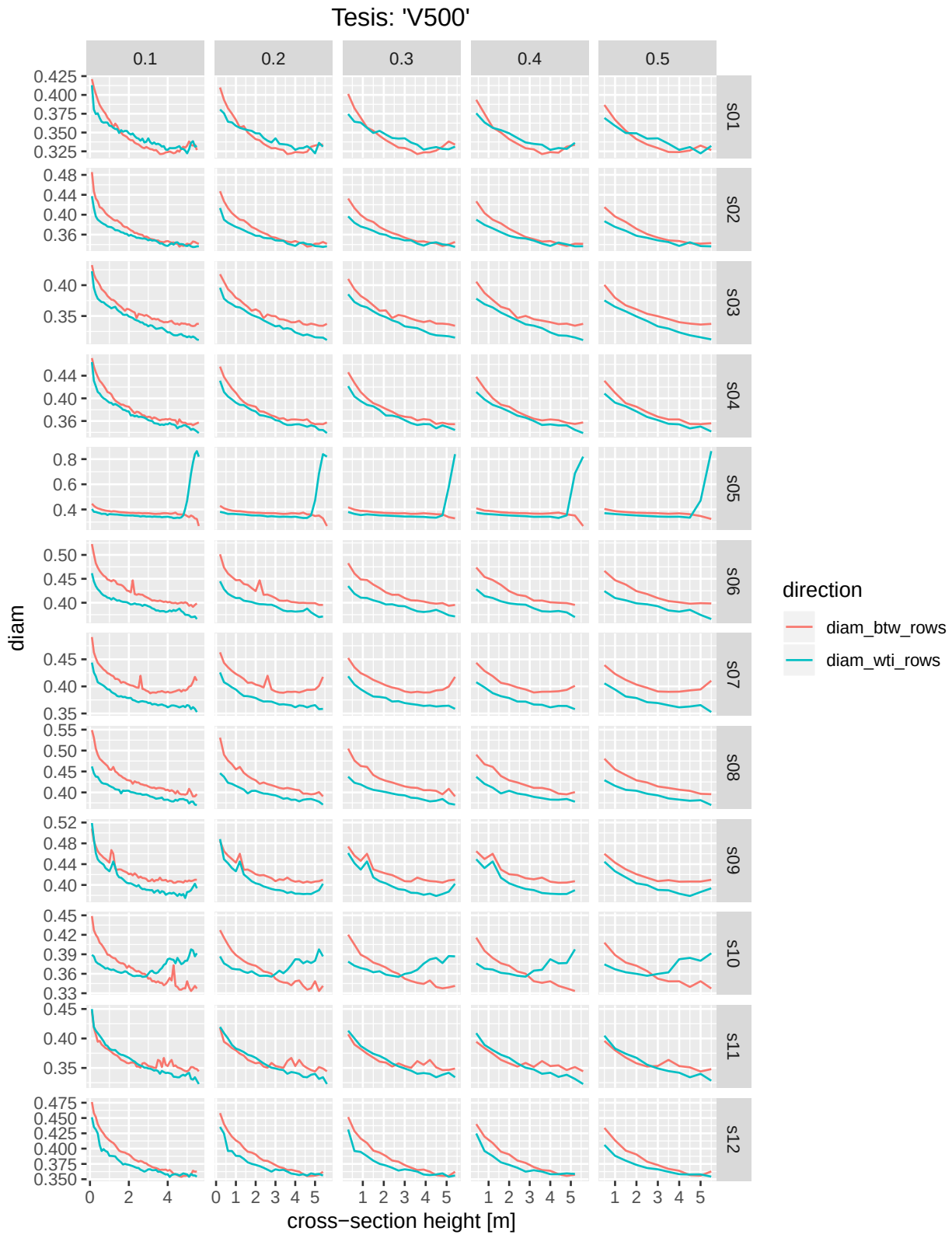
```
##
```

```
## [[2]]
```


Tesis: 'V450'
0.1
0.2
0.3
0.4
0.5
s01
s02
s03
s04
s05
s06
s07
s08
s09
s10
s11
s12
diam
cross−section height [m]
direction
diam_btw_rows
diam_wti_rows

```
##
```

```
## [[3]]
```


Tesis: 'V500'
0.1
0.2
0.3
0.4
0.5
s01
s02
s03
s04
s05
s06
s07
s08
s09
s10
s11
s12
diam
cross−section height [m]
direction
diam_btw_rows
diam_wti_rows

```r
# install.packages("svglite")
for(i in 1:3) ggsave(paste0("AllProfiles",i,".svg"), gl[[i]], scale = 2)
```

```
## Saving 14 x 18 in image

## Saving 14 x 18 in image
## Saving 14 x 18 in image
```