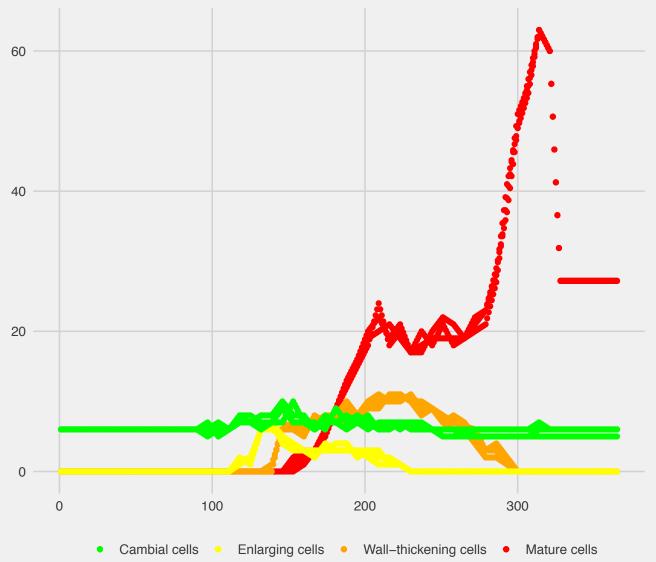
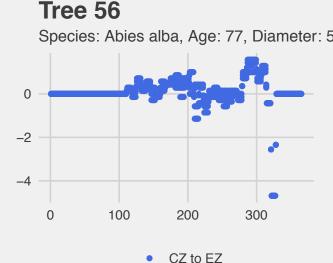
Tree 56

Species: Abies alba, Age: 77, Diameter: 57, Height: 31, Anat. data: 27.2



## Tree 56 Species: Abies alba, Age: 77, Diameter: 5

Source: GRA 2009

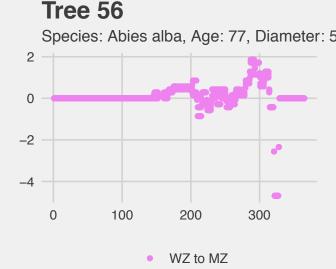


Source: GRA 2009

# Tree 56 Species: Abies alba, Age: 77, Diameter: 5

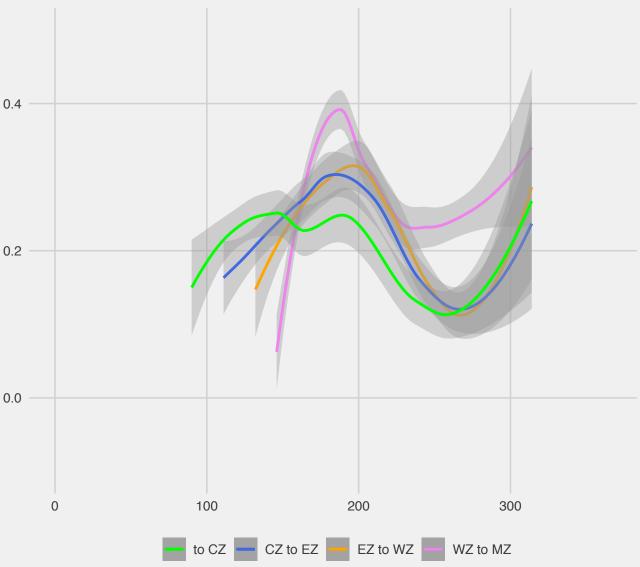
to CZ

Source: GRA 2009



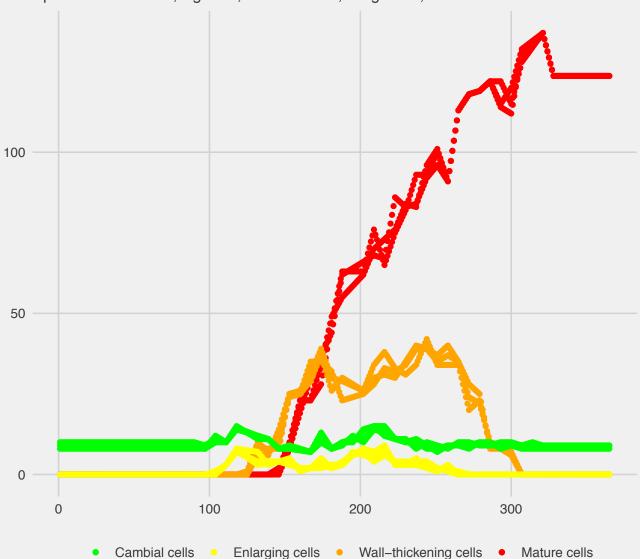
Tree 56

Species: Abies alba, Age: 77, Diameter: 57, Height: 31, Anat. data: 27.2



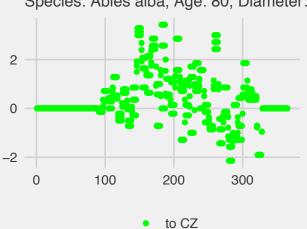
**Tree 57** 

Species: Abies alba, Age: 80, Diameter: 54, Height: 32, Anat. data: 123.7



### **Tree 57**

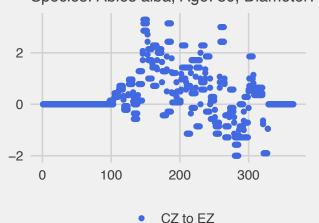
Species: Abies alba, Age: 80, Diameter: 5



Source: GRA 2009

### **Tree 57**

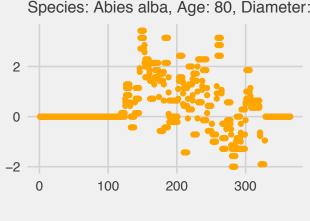
Species: Abies alba, Age: 80, Diameter: 5



Source: GRA 2009

### **Tree 57**

Species: Abies alba, Age: 80, Diameter: 5

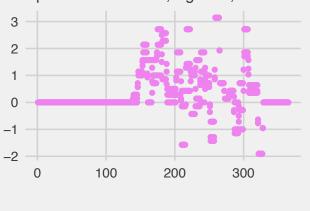


EZ to WZ

Source: GRA 2009

### **Tree 57**

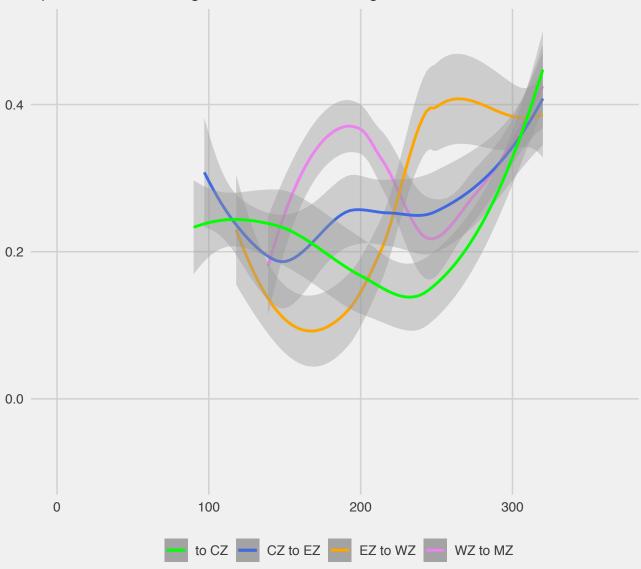
Species: Abies alba, Age: 80, Diameter: 5



WZ to MZ

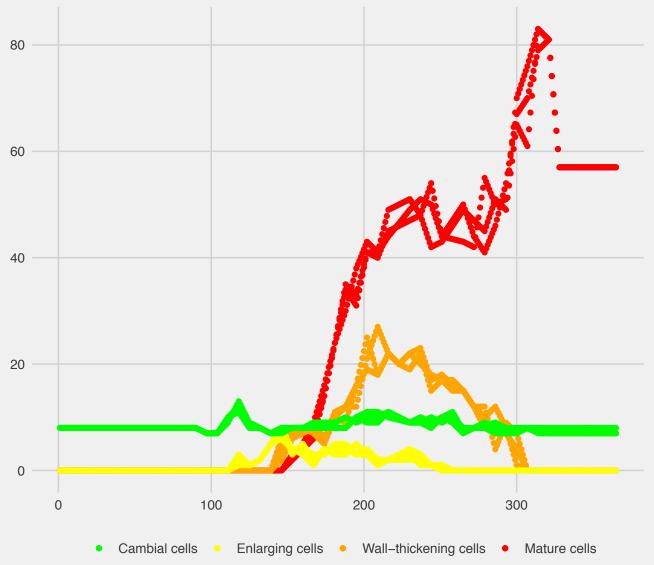
**Tree 57** 

Species: Abies alba, Age: 80, Diameter: 54, Height: 32, Anat. data: 123.7



Tree 64

Species: Abies alba, Age: 68, Diameter: 70, Height: 34, Anat. data: 57



### Tree 64 Species: Abies alba, Age: 68, Diameter: 7

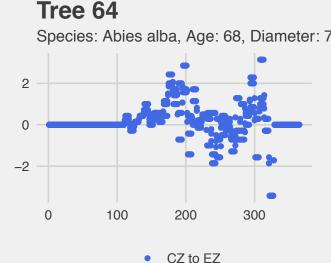
200

to CZ

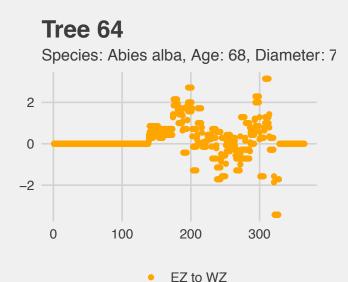
100

Source: GRA 2009

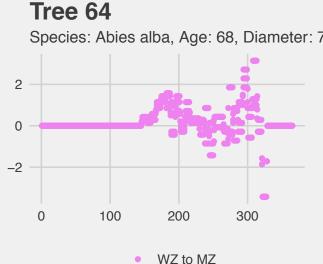
300



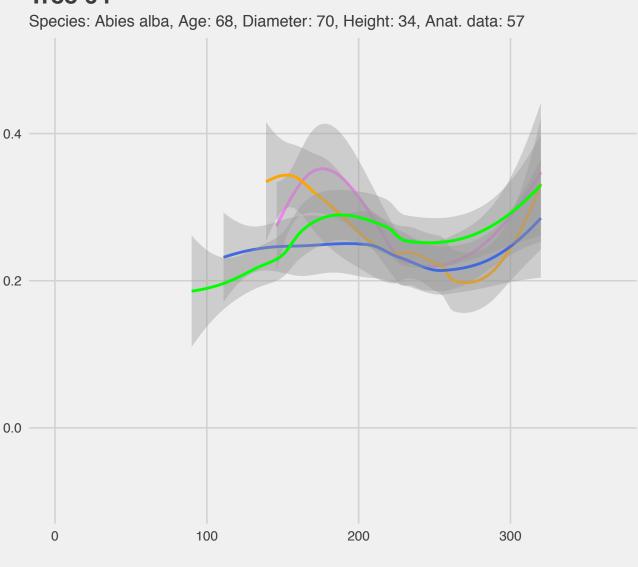
Source: GRA 2009



Source: GRA 2009



Tree 64



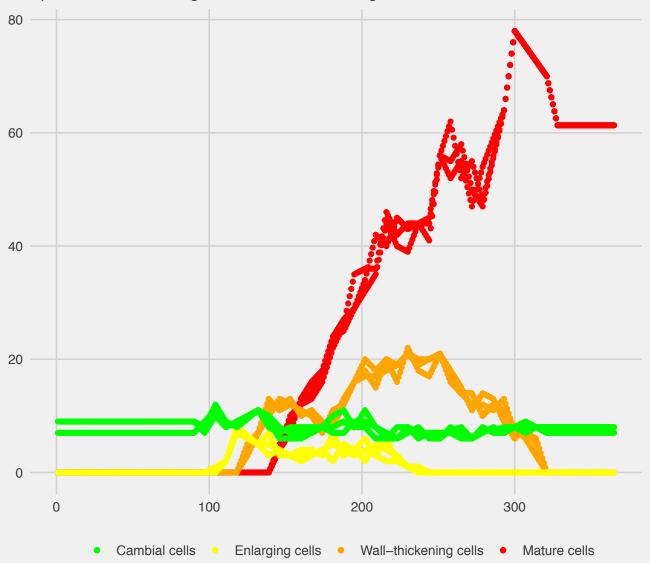
to CZ — CZ to EZ — EZ to WZ —

Source: daily fluxes from GRA 2009

WZ to MZ

Tree 67

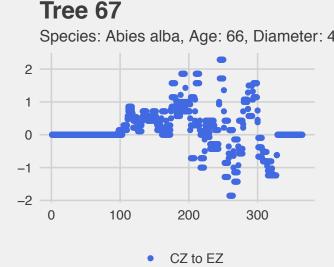
Species: Abies alba, Age: 66, Diameter: 49, Height: 30, Anat. data: 61.3



## Tree 67 Species: Abies alba, Age: 66, Diameter: 4 2 1 0 -1 -2 0 100 200 300

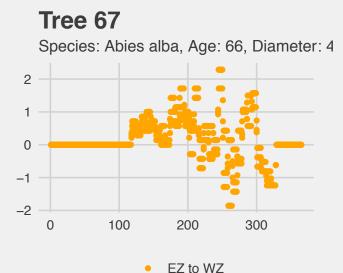
to CZ

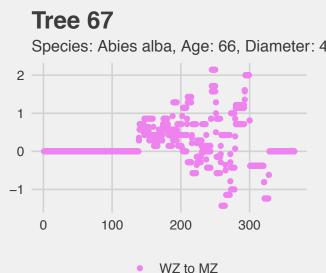
Source: GRA 2009



Source: GRA 2009

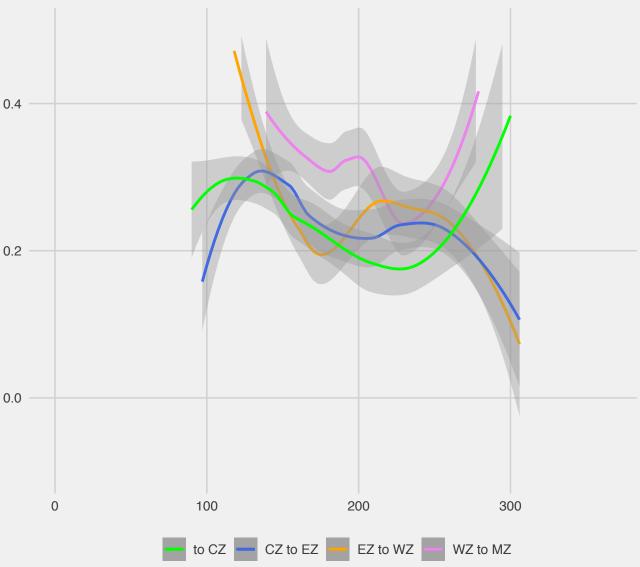
Source: GRA 2009





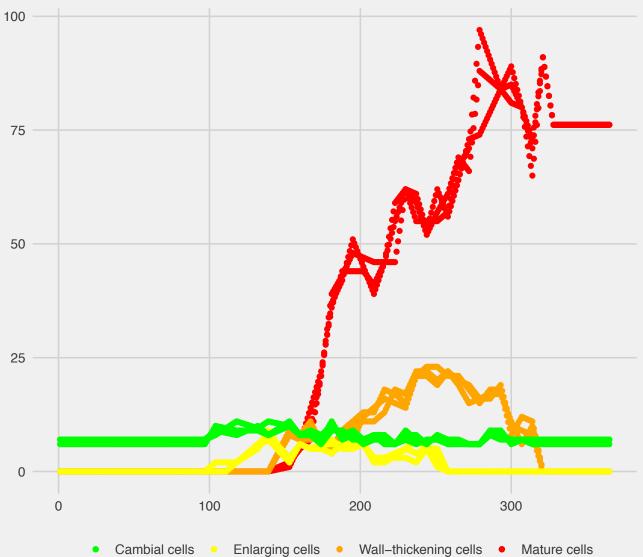
Tree 67

Species: Abies alba, Age: 66, Diameter: 49, Height: 30, Anat. data: 61.3



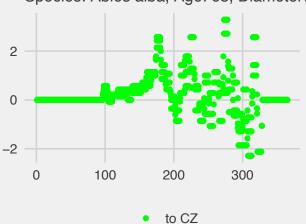
Tree 69

Species: Abies alba, Age: 68, Diameter: 57, Height: 30, Anat. data: 76.2



### Tree 69

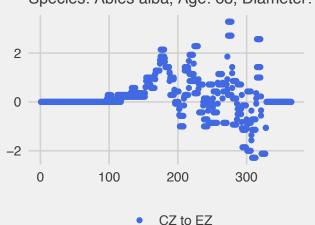
Species: Abies alba, Age: 68, Diameter: 5



Source: GRA 2009

### Tree 69

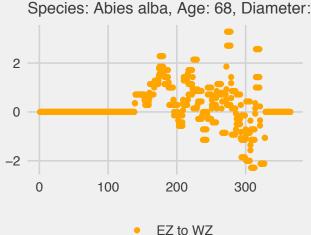
Species: Abies alba, Age: 68, Diameter: 5



Source: GRA 2009

### Tree 69

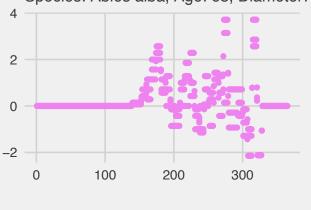
Species: Abies alba, Age: 68, Diameter: 5



Source: GRA 2009

### Tree 69

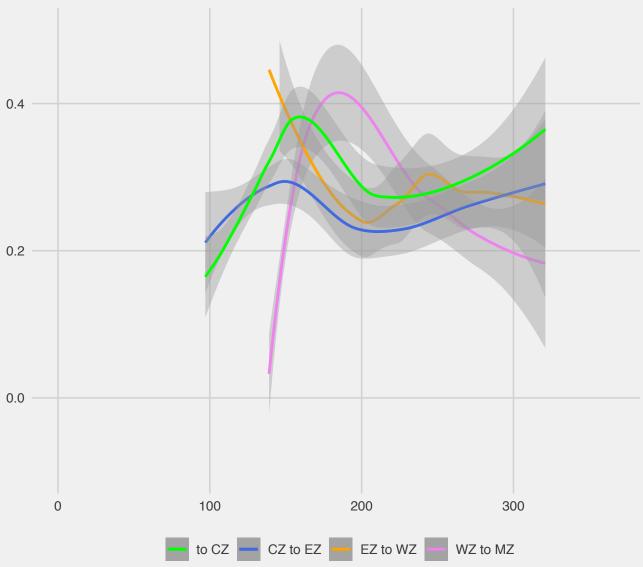
Species: Abies alba, Age: 68, Diameter: 5



WZ to MZ

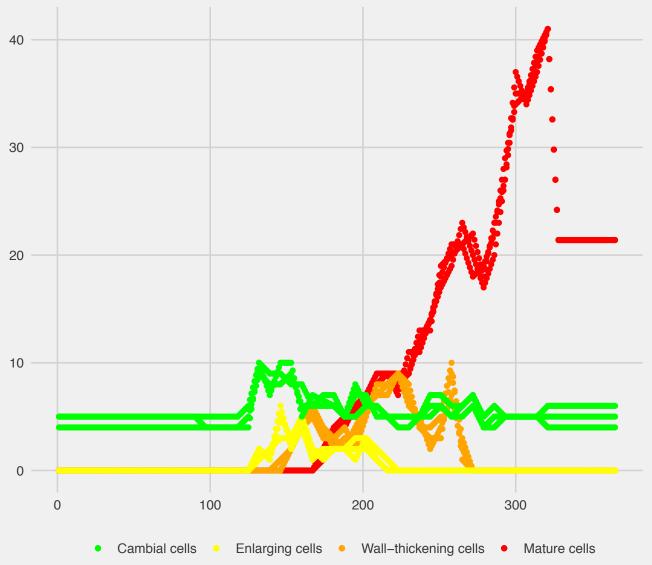
Tree 69

Species: Abies alba, Age: 68, Diameter: 57, Height: 30, Anat. data: 76.2



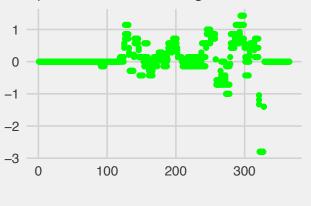
**Tree 58** 

Species: Picea abies, Age: 67, Diameter: 61, Height: 33, Anat. data: 21.4



### **Tree 58**

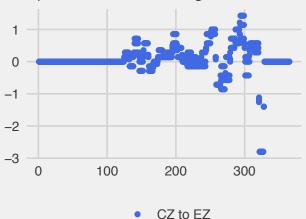
Species: Picea abies, Age: 67, Diameter:



Source: GRA 2009

### **Tree 58**

Species: Picea abies, Age: 67, Diameter:

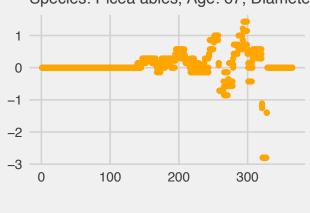


Source: GRA 2009

### **Tree 58**

Species: Picea abies, Age: 67, Diameter:

to CZ

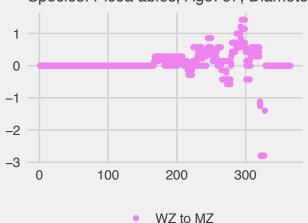


EZ to WZ

Source: GRA 2009

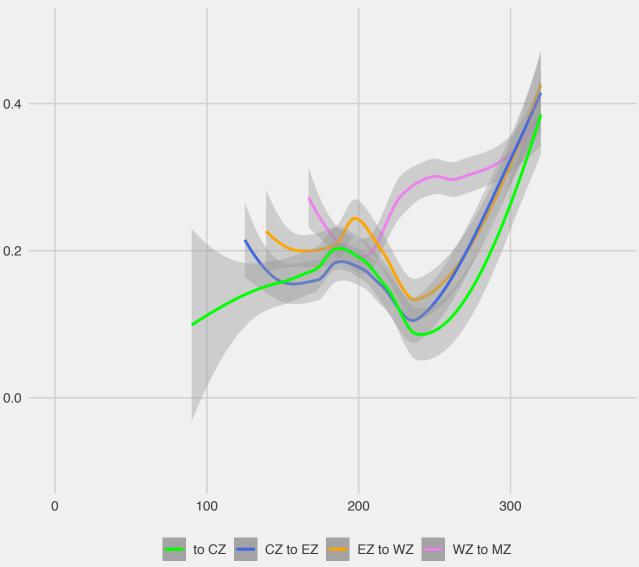
### **Tree 58**

Species: Picea abies, Age: 67, Diameter:



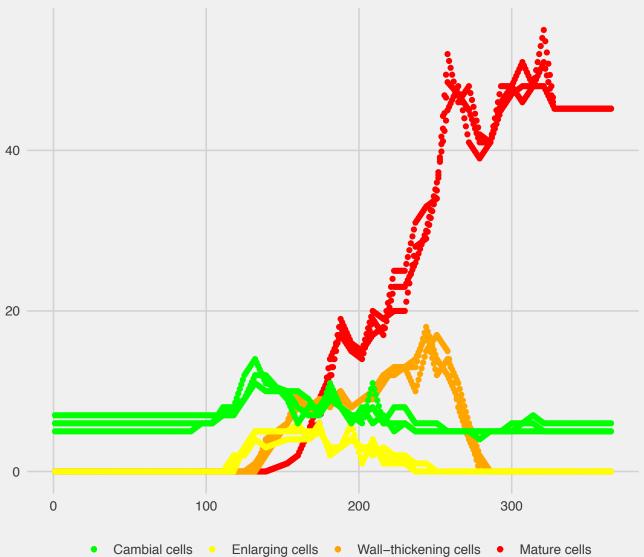
**Tree 58** 

Species: Picea abies, Age: 67, Diameter: 61, Height: 33, Anat. data: 21.4



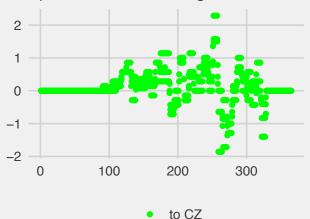
**Tree 59** 

Species: Picea abies, Age: 68, Diameter: 58, Height: 37, Anat. data: 45.2



### **Tree 59**

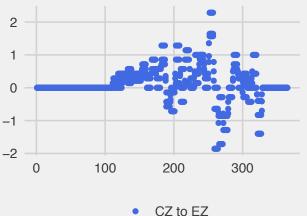
Species: Picea abies, Age: 68, Diameter:



Source: GRA 2009

### Tree 59

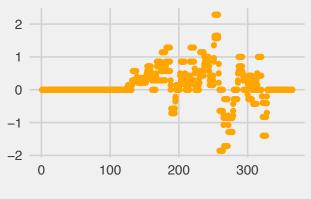
Species: Picea abies, Age: 68, Diameter:



Source: GRA 2009

### Tree 59

Species: Picea abies, Age: 68, Diameter:

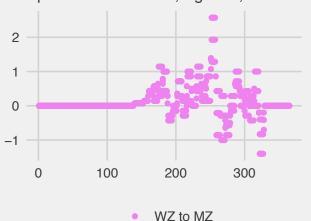


EZ to WZ

Source: GRA 2009

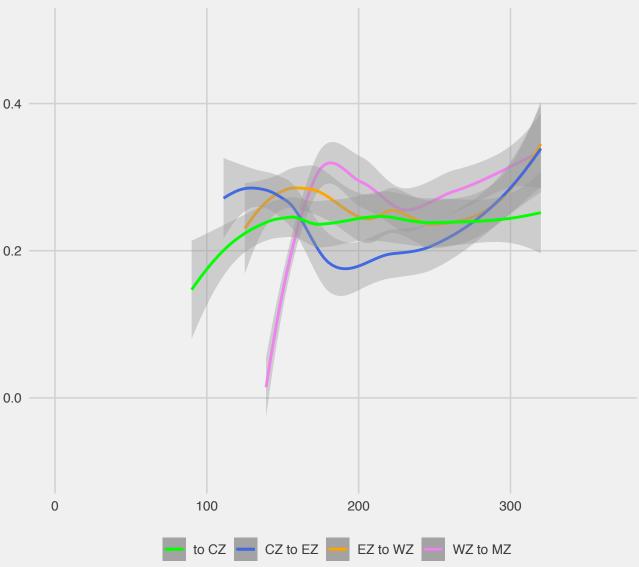
### Tree 59

Species: Picea abies, Age: 68, Diameter:

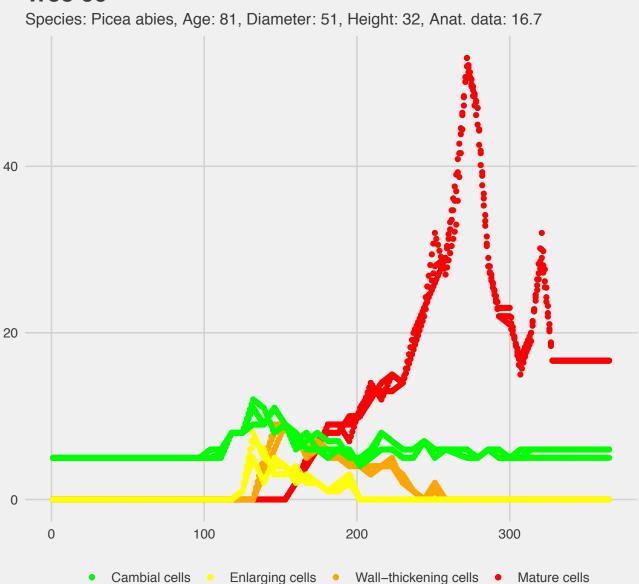


Tree 59

Species: Picea abies, Age: 68, Diameter: 58, Height: 37, Anat. data: 45.2

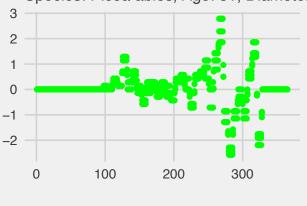


Tree 66



### Tree 66

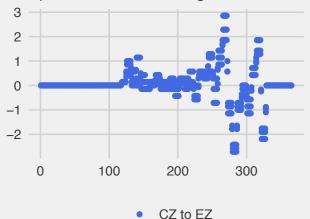
Species: Picea abies, Age: 81, Diameter:



Source: GRA 2009

### Tree 66

Species: Picea abies, Age: 81, Diameter:

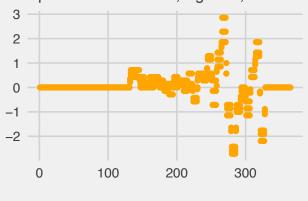


Source: GRA 2009

### Tree 66

Species: Picea abies, Age: 81, Diameter:

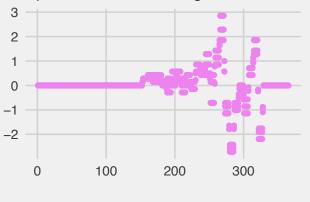
to CZ



EZ to WZ

### Tree 66

Species: Picea abies, Age: 81, Diameter:

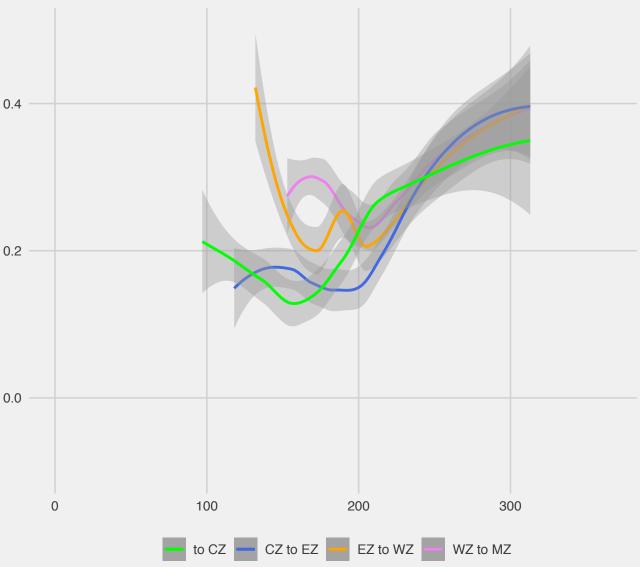


WZ to MZ

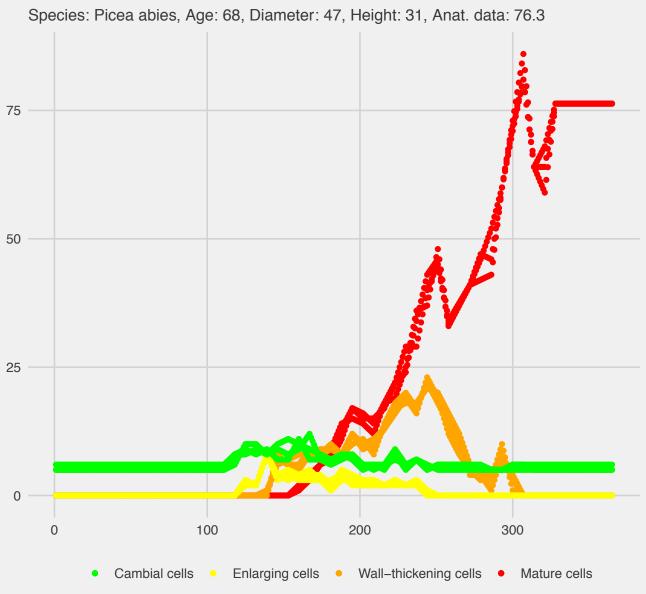
Source: GRA 2009 Source: GRA 2009

Tree 66

Species: Picea abies, Age: 81, Diameter: 51, Height: 32, Anat. data: 16.7



Tree 68



### Tree 68

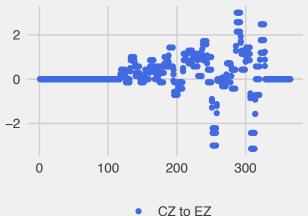
Species: Picea abies, Age: 68, Diameter:



Source: GRA 2009

### Tree 68

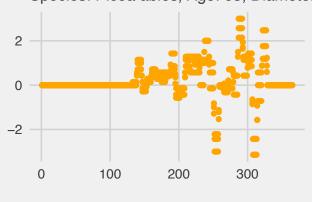
Species: Picea abies, Age: 68, Diameter:



Source: GRA 2009

Tree 68

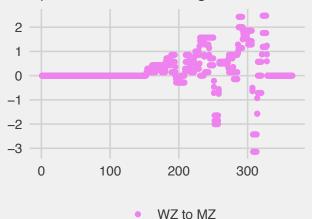
Species: Picea abies, Age: 68, Diameter:



EZ to WZ

### Tree 68

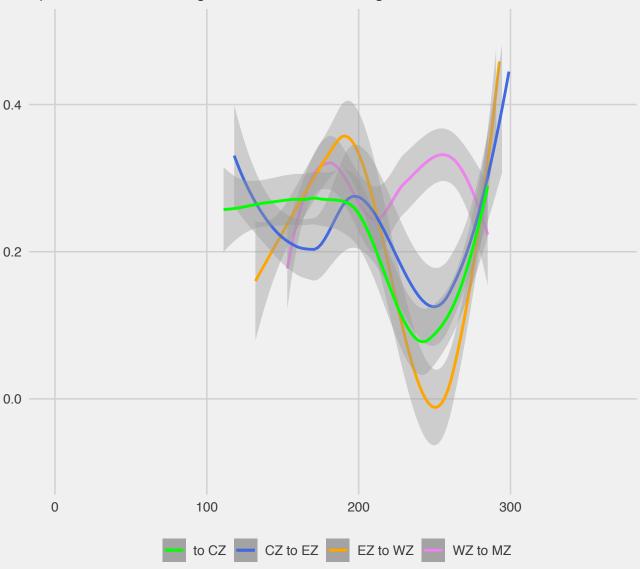
Species: Picea abies, Age: 68, Diameter:



Source: GRA 2009

Tree 68





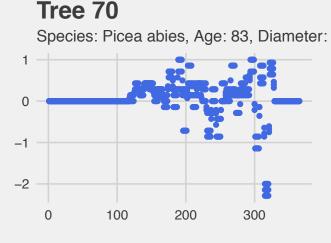
**Tree 70** 

Species: Picea abies, Age: 83, Diameter: 47, Height: 30, Anat. data: 23.5 30 20 10 0 100 200 300 Cambial cells • Enlarging cells • Wall-thickening cells • Mature cells

## Tree 70 Species: Picea abies, Age: 83, Diameter: 1 0 -1 -2 0 100 200 300

Source: GRA 2009

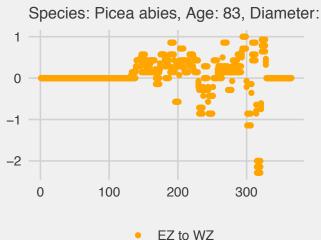
to CZ



CZ to EZ

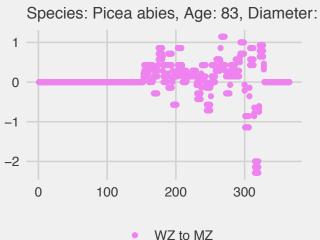
Source: GRA 2009

### Tree 70



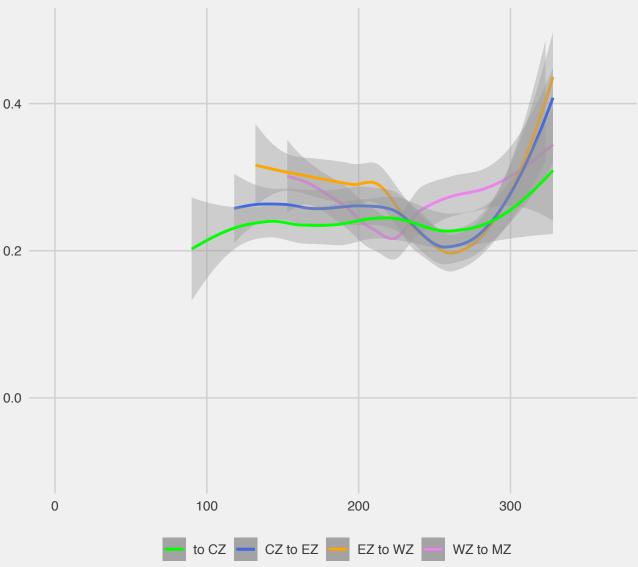
Source: GRA 2009

### Tree 70



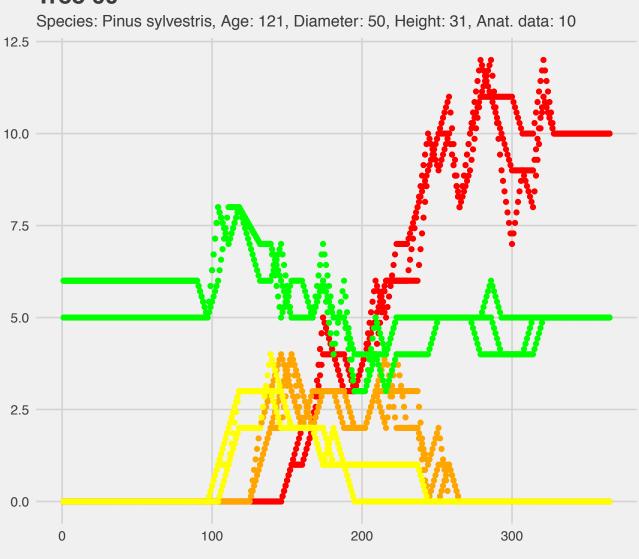
**Tree 70** 





Tree 60

Cambial cells

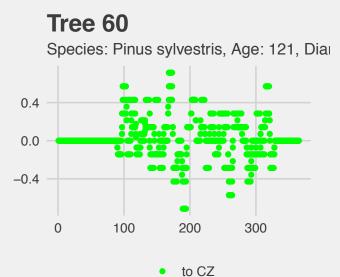


Enlarging cells

Source: daily cell count from GRA 2009

Mature cells

Wall-thickening cells



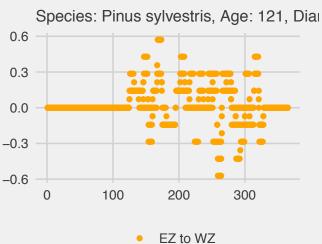
Source: GRA 2009

### 0.25 0.00 -0.25 -0.50 0 100 200 300

Source: GRA 2009

CZ to EZ

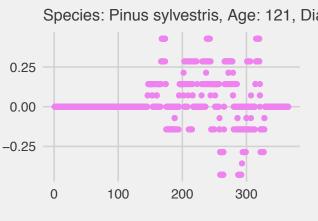
### Tree 60



Source: GRA 2009

### Tree 60

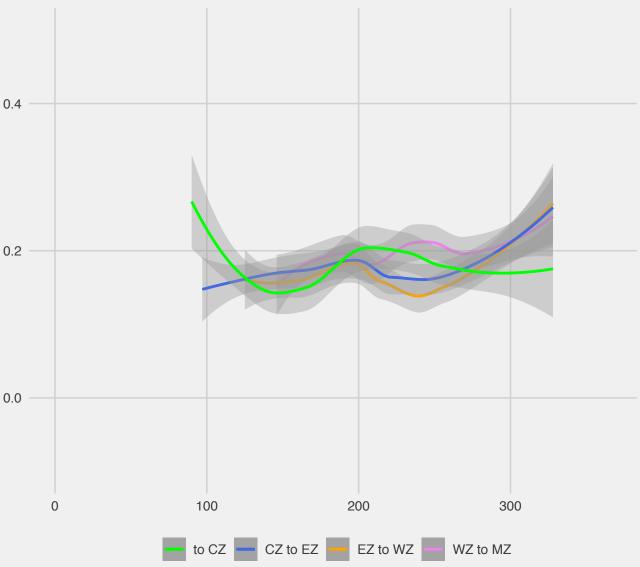
Tree 60



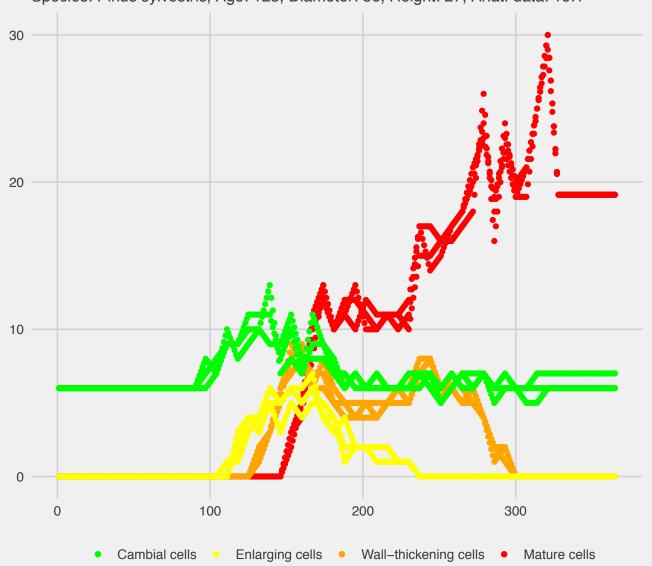
WZ to MZ

Tree 60





**Tree 61**Species: Pinus sylvestris, Age: 123, Diameter: 56, Height: 27, Anat. data: 19.1



Tree 61
Species: Pinus sylvestris, Age: 123, Diam

1
0
-1
-2
0
100
200
300

Source: GRA 2009

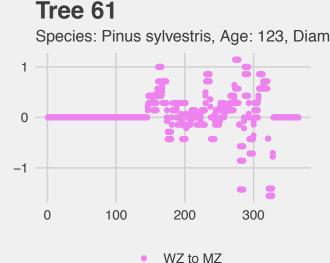
# Tree 61 Species: Pinus sylvestris, Age: 123, Diam 1 0 1 0 100 200 300

Source: GRA 2009

# Tree 61 Species: Pinus sylvestris, Age: 123, Diam 1 0 1 0 100 200 300 EZ to WZ

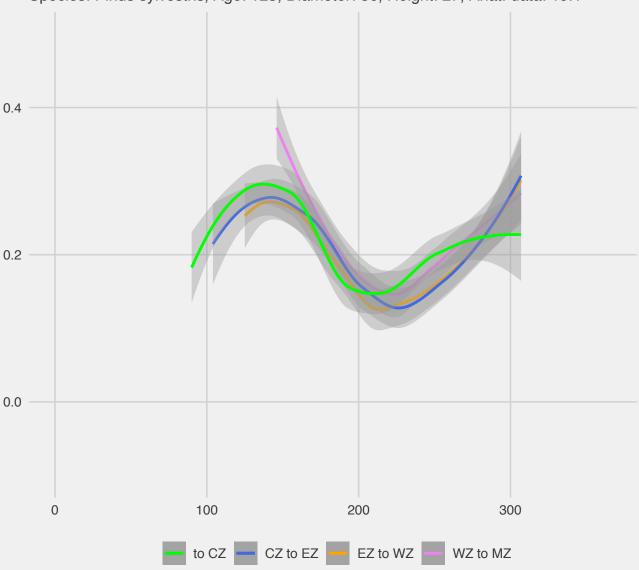
to CZ

Source: GRA 2009



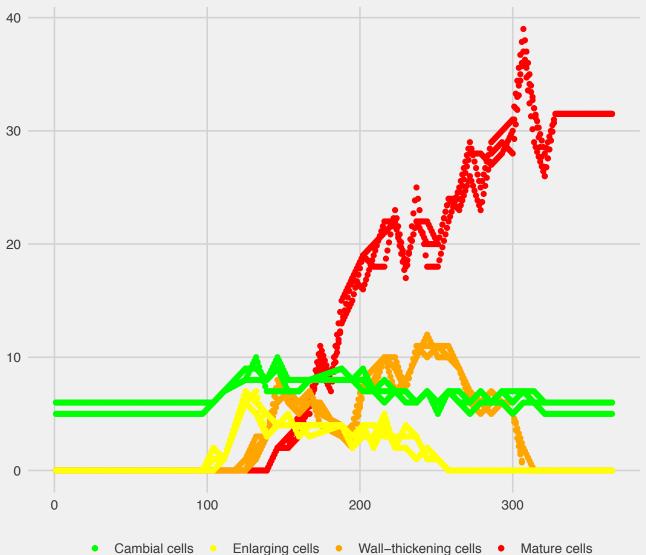
Tree 61

Species: Pinus sylvestris, Age: 123, Diameter: 56, Height: 27, Anat. data: 19.1



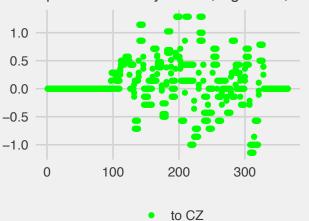
Tree 62

Species: Pinus sylvestris, Age: 124, Diameter: 53, Height: 25, Anat. data: 31.5



### Tree 62

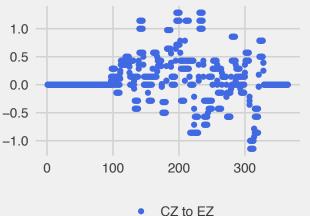
Species: Pinus sylvestris, Age: 124, Diai



Source: GRA 2009

### Tree 62

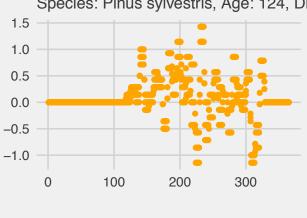
Species: Pinus sylvestris, Age: 124, Dia



Source: GRA 2009

### Tree 62

Species: Pinus sylvestris, Age: 124, Diai

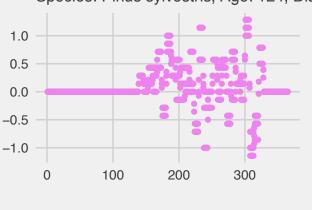


EZ to WZ

Source: GRA 2009

### Tree 62

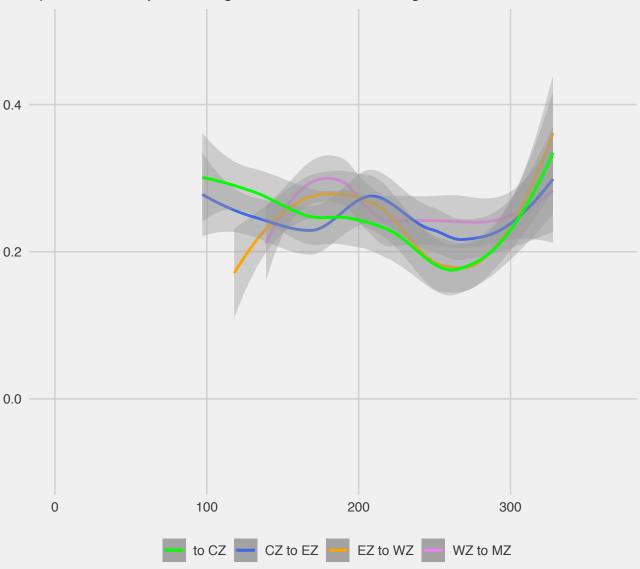
Species: Pinus sylvestris, Age: 124, Dia



WZ to MZ

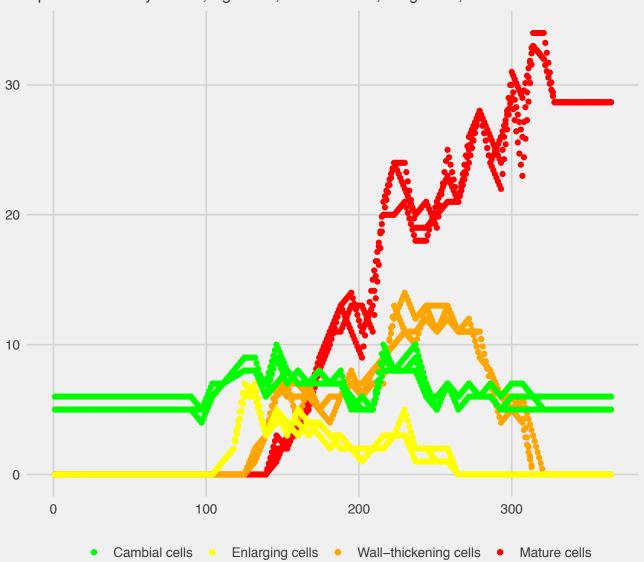
Tree 62

Species: Pinus sylvestris, Age: 124, Diameter: 53, Height: 25, Anat. data: 31.5



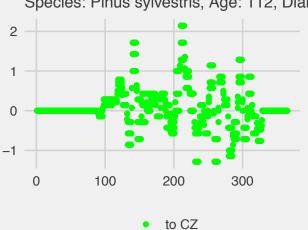
Tree 63

Species: Pinus sylvestris, Age: 112, Diameter: 46, Height: 28, Anat. data: 28.7



### Tree 63

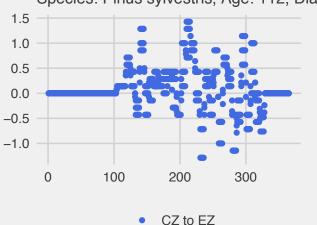
Species: Pinus sylvestris, Age: 112, Diam



Source: GRA 2009

### Tree 63

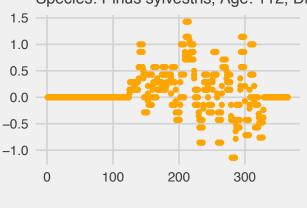
Species: Pinus sylvestris, Age: 112, Dia



Source: GRA 2009

### Tree 63

Species: Pinus sylvestris, Age: 112, Diai

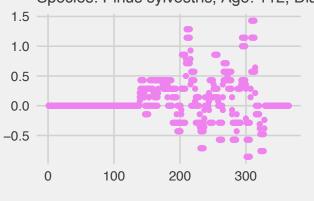


Source: GRA 2009

EZ to WZ

### Tree 63

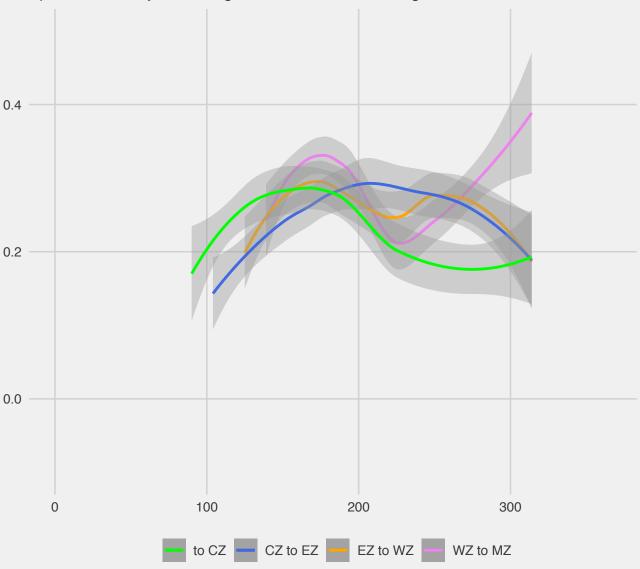
Species: Pinus sylvestris, Age: 112, Dia



WZ to MZ

Tree 63

Species: Pinus sylvestris, Age: 112, Diameter: 46, Height: 28, Anat. data: 28.7



Tree 65

Species: Pinus sylvestris, Age: 112, Diameter: 59, Height: 26, Anat. data: 23.2



### Tree 65 Species: Pinus sylvestris, Age: 112, Dial 1.0 0.5 0.0 -0.5 -1.0

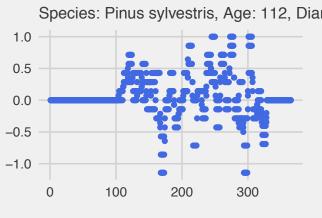
200

to CZ

Source: GRA 2009

300

### Tree 65

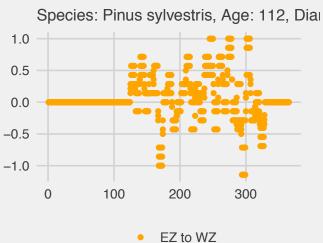


CZ to EZ

Source: GRA 2009

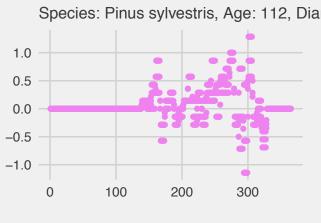
Tree 65

100



Source: GRA 2009

Tree 65



WZ to MZ

Tree 65

Species: Pinus sylvestris, Age: 112, Diameter: 59, Height: 26, Anat. data: 23.2

