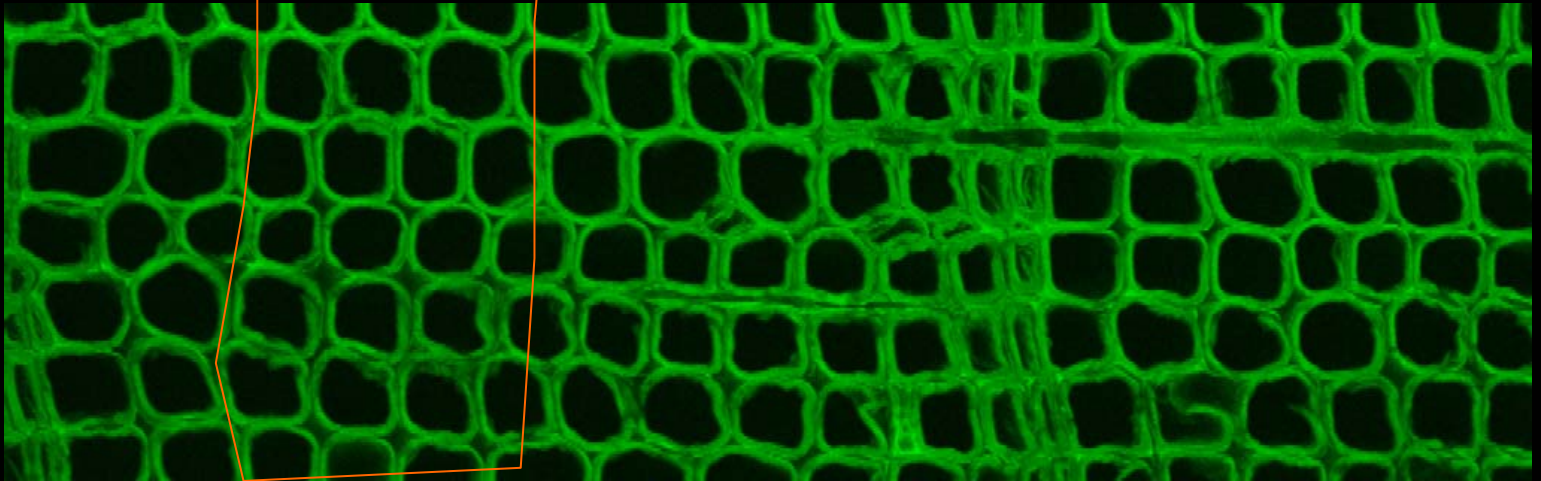
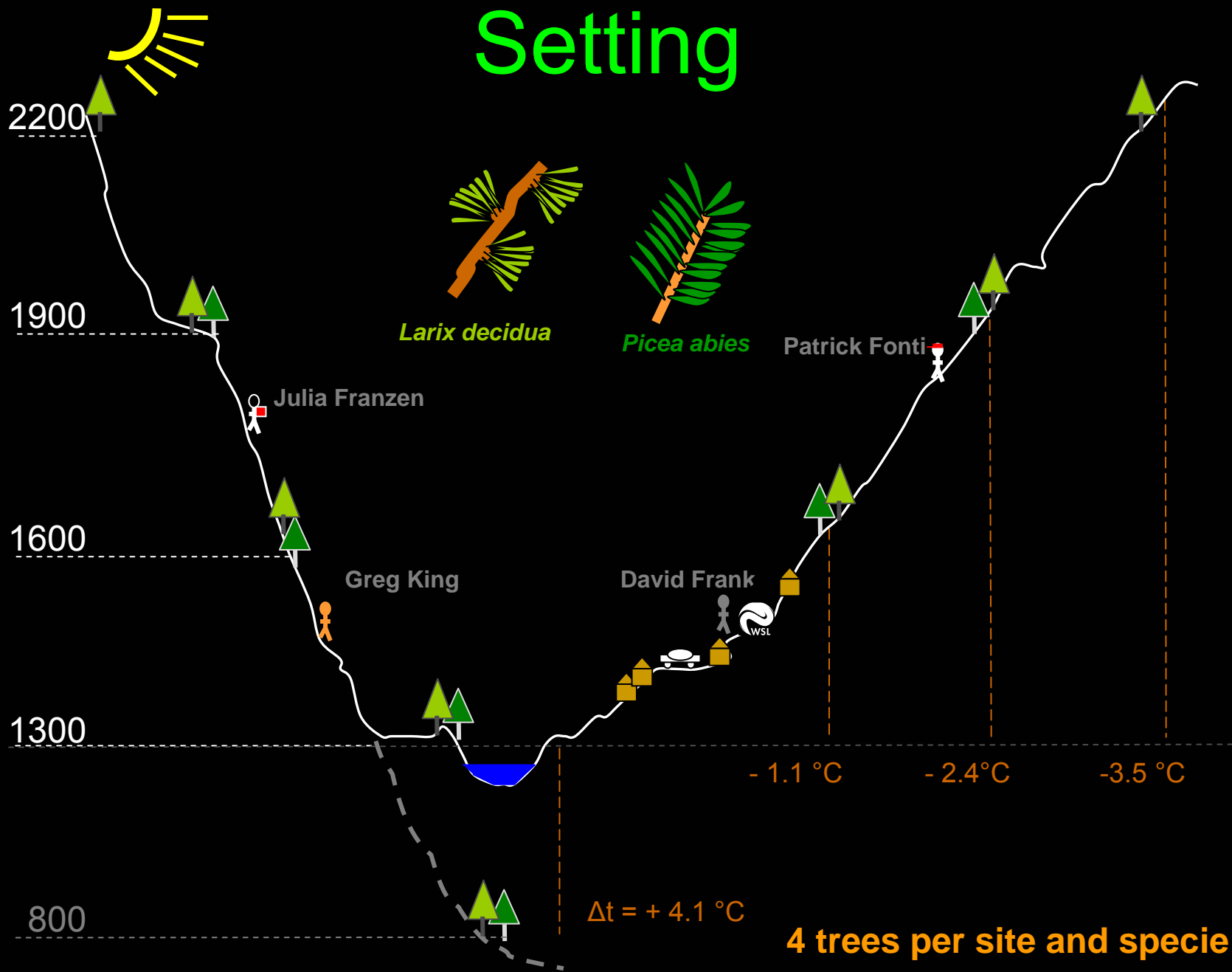




**Temperature-induced differences in timing
of intra-annual growth of subalpine
Larix decidua and *Picea abies***





Phenology

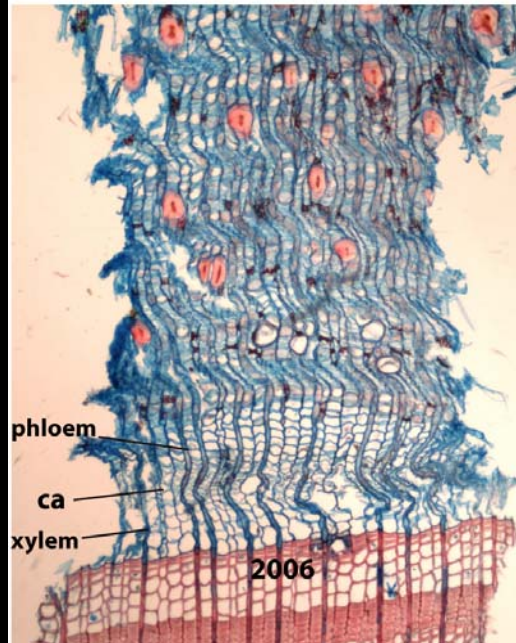


Monitoring intra-annual growth in stem

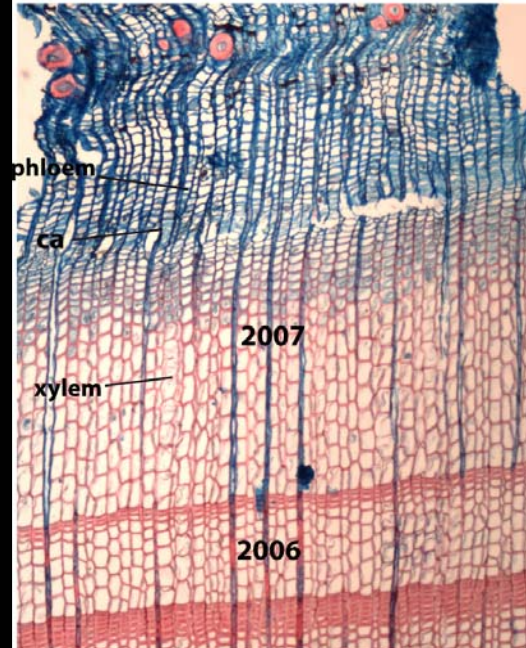
Weekly micro sampling
Vegetation seasons 2007-2008



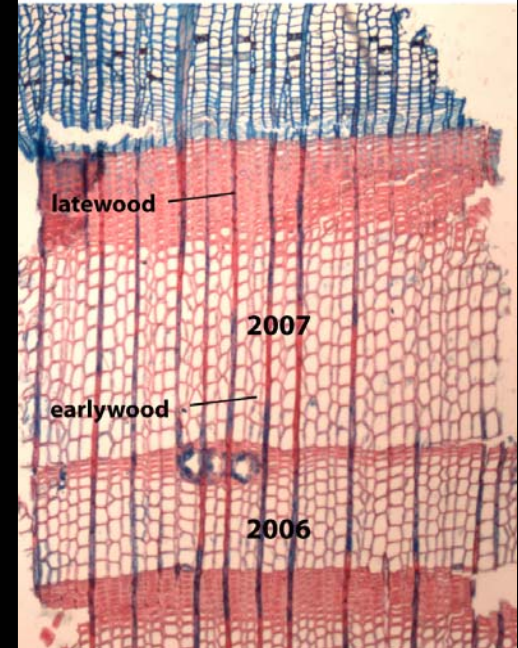
May 31, 2007



July 24, 2007



September 12, 2007

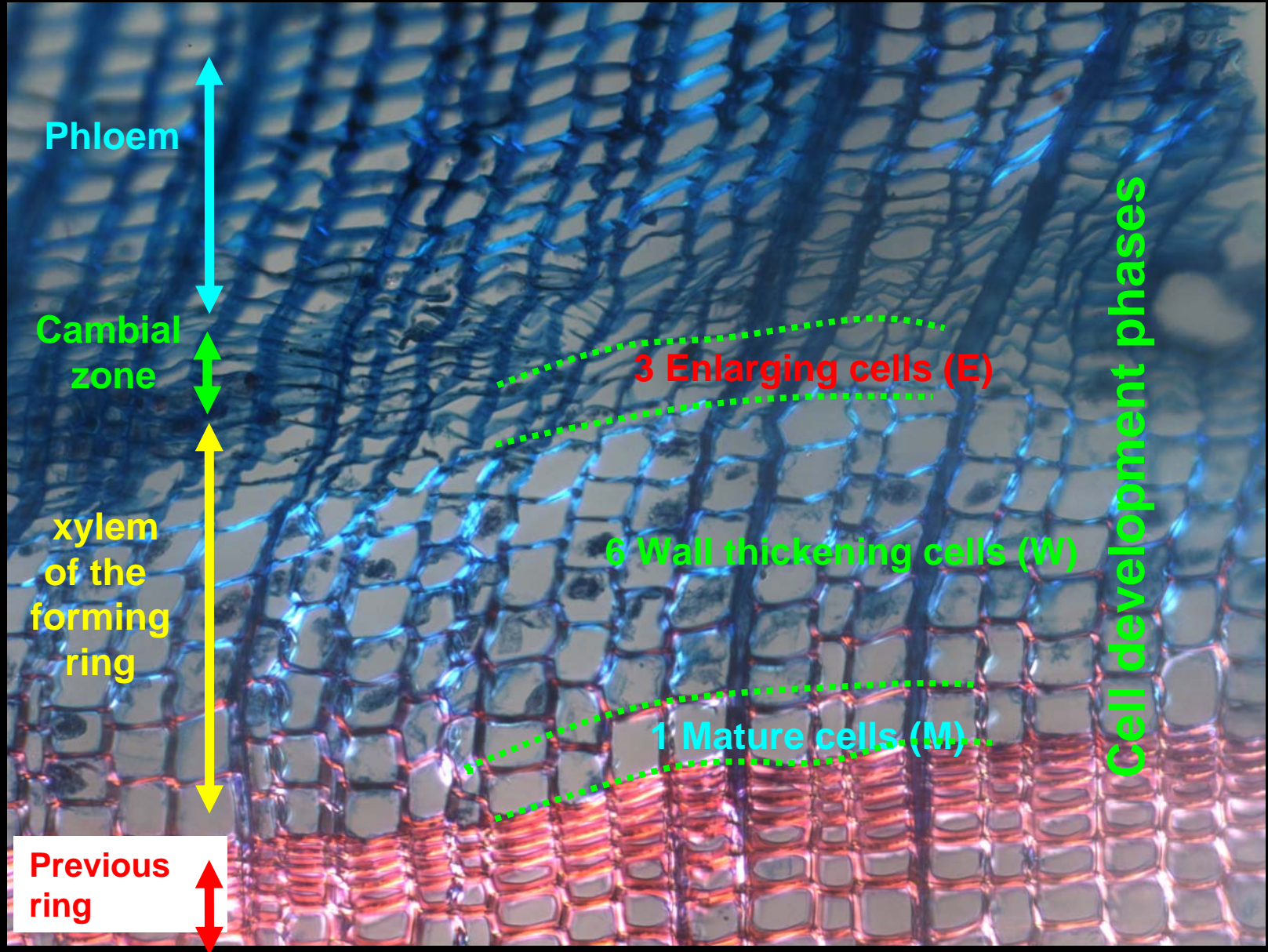


The climatic years 07 and 08

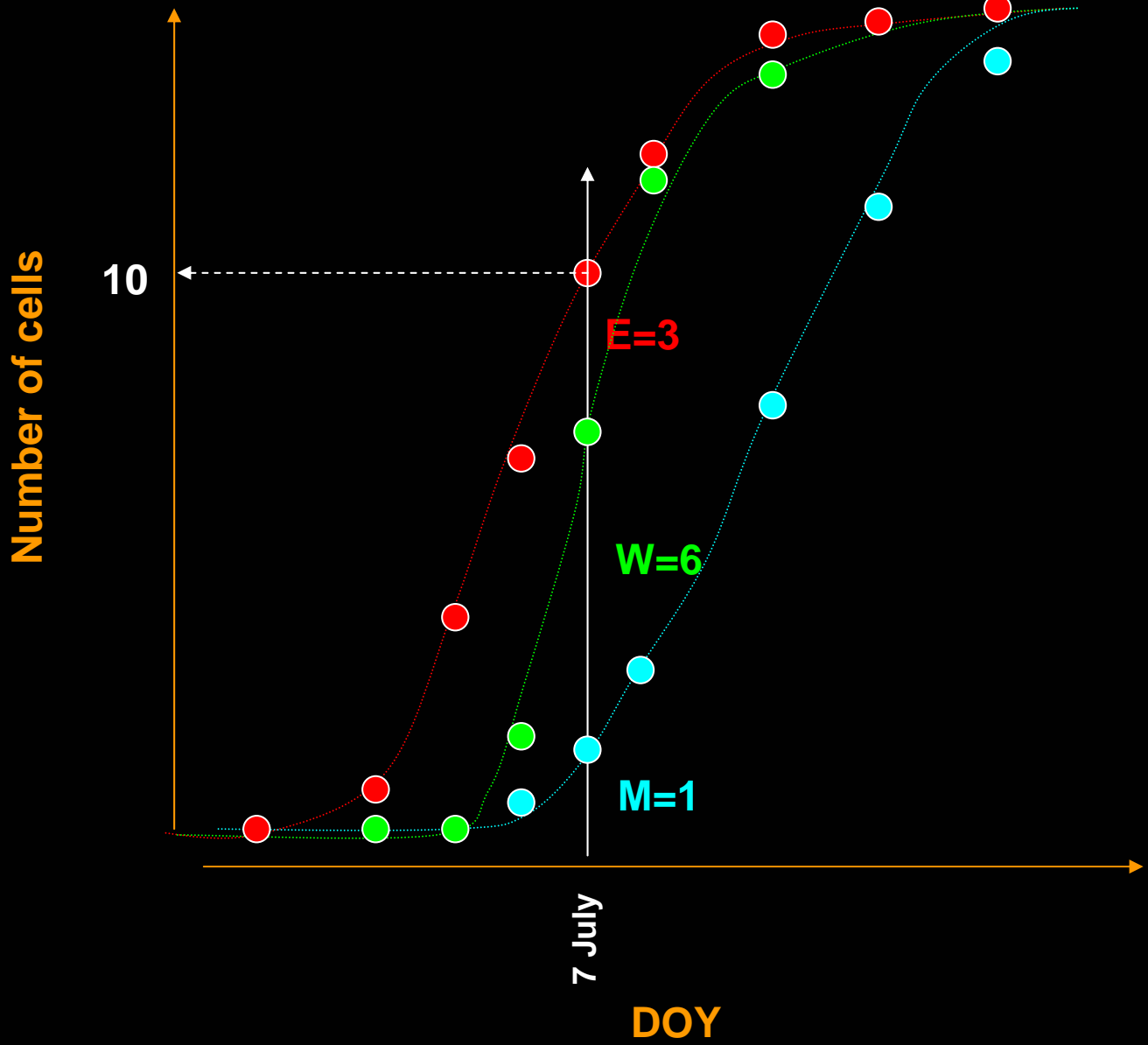
Ulrichen



Micro-section (Larch, 7 July, 1300 masl)

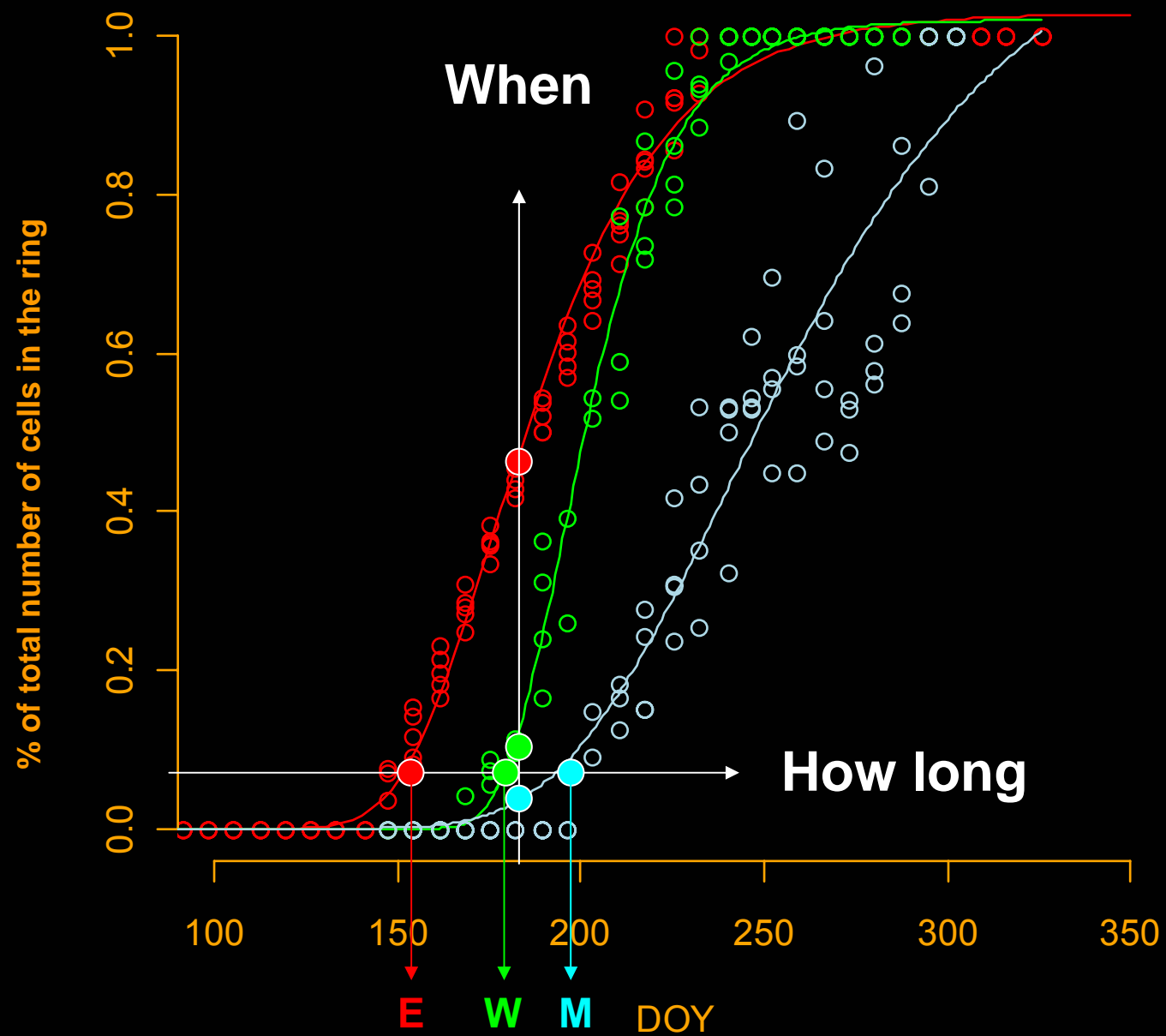


Dynamic of wood formation



Dynamic of wood formation

S22L 08



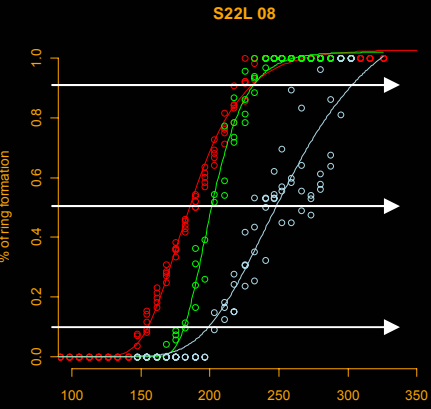
How long

Worlddendro, Rovaniemi, 17 June 2010

Intra-annual cambium dynamics

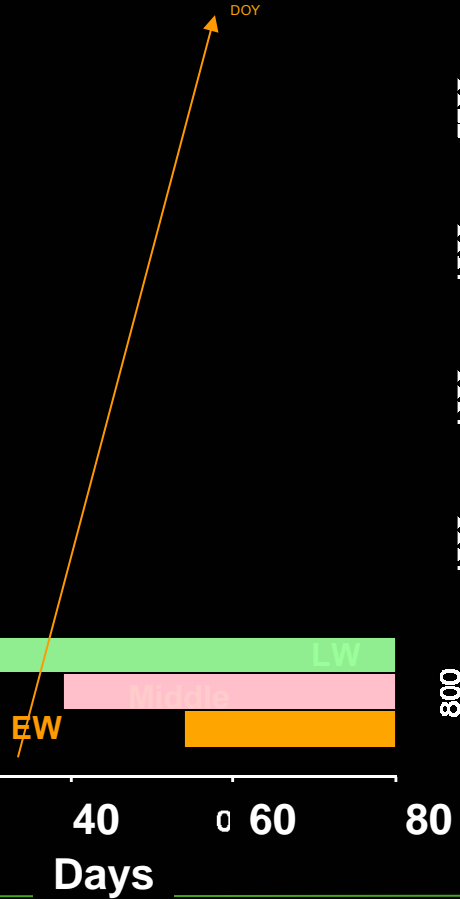
Elevation

2200
1900
1600
1300
800



Larix decidua

2008



How long

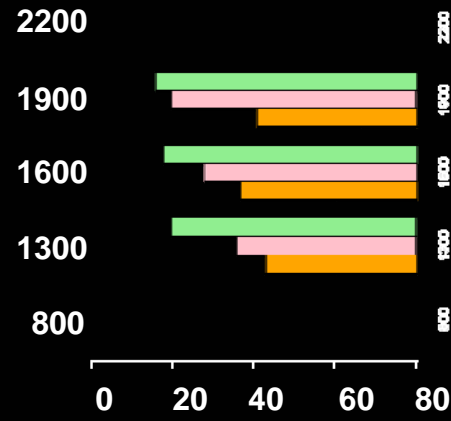
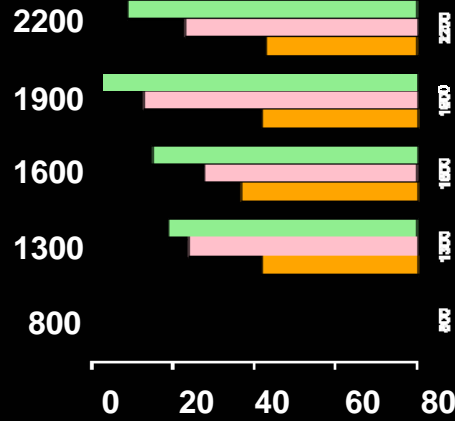


Larix decidua



Picea abies

2007

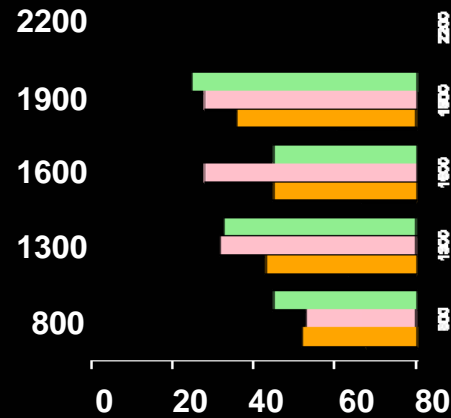


Roughly 40, 55, 65 days

Spruce faster

Increasing duration with elevation especially in 2008

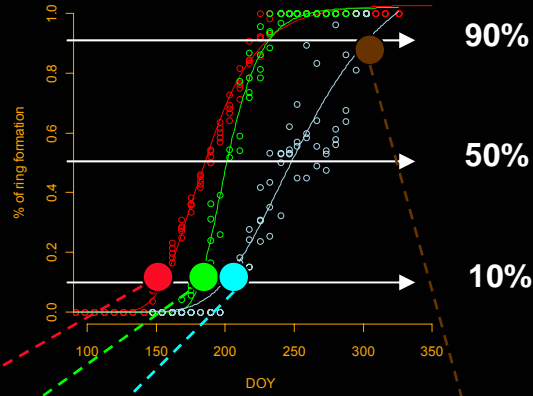
2008



When



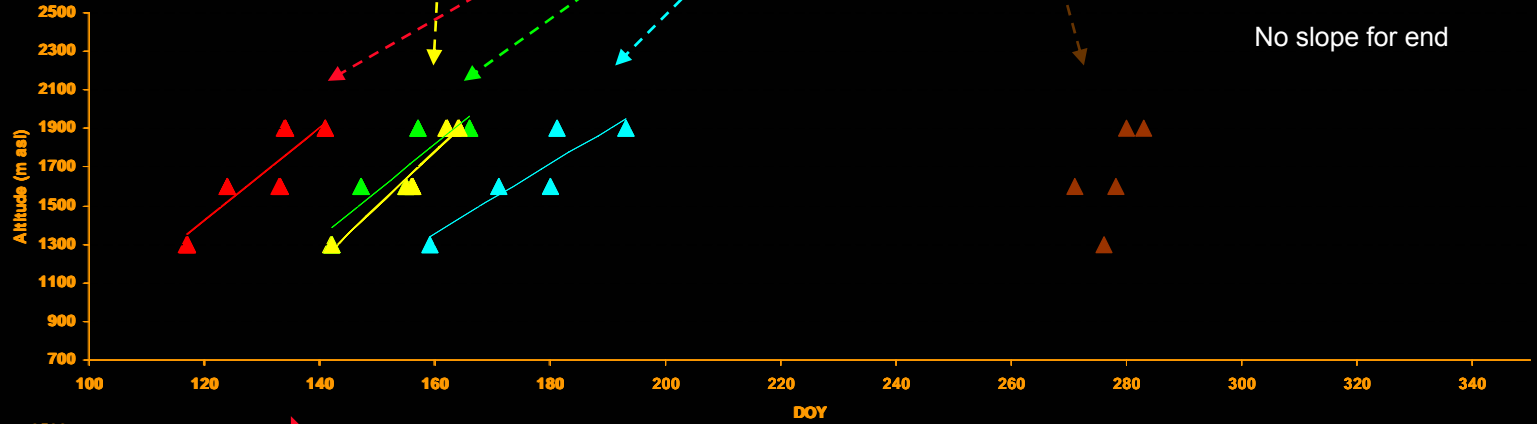
S22L 08



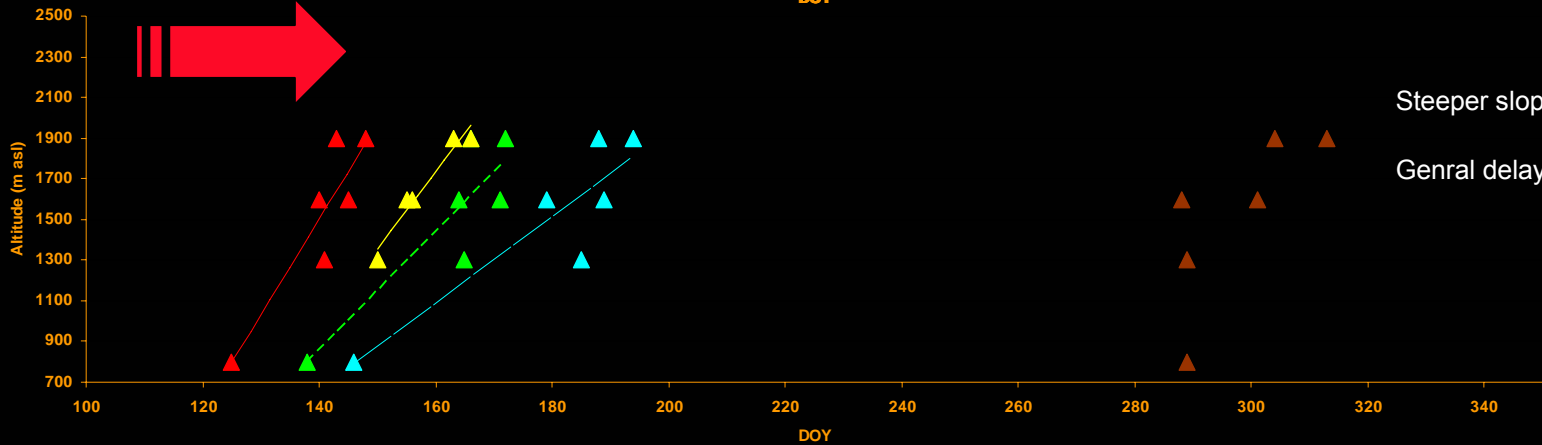
Decreasing slope for onset

No slope for end

2007



2008



Steeper slopes

General delay

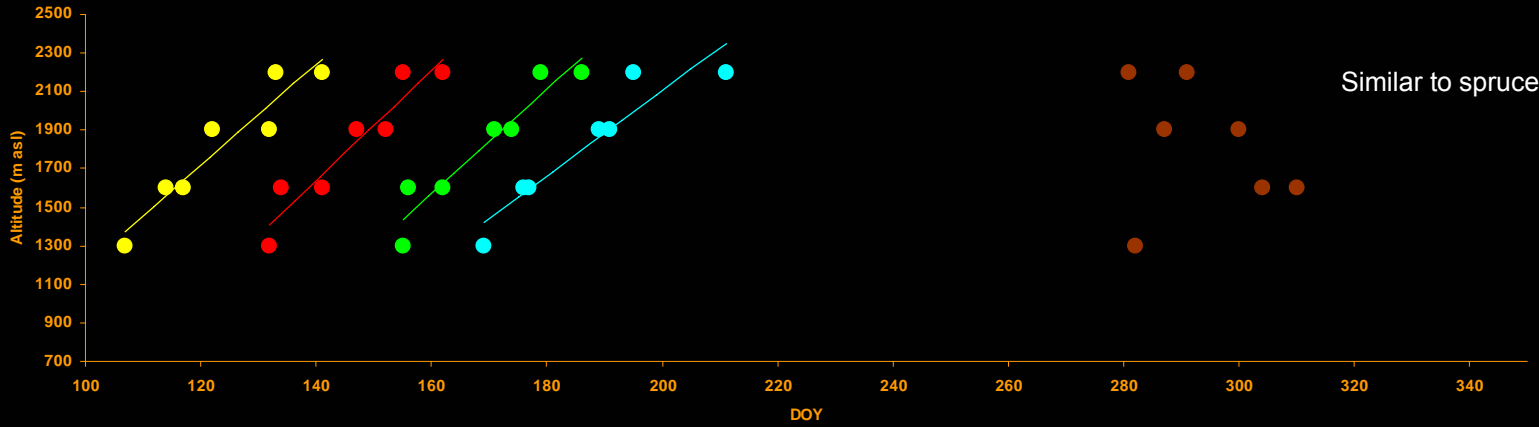
When



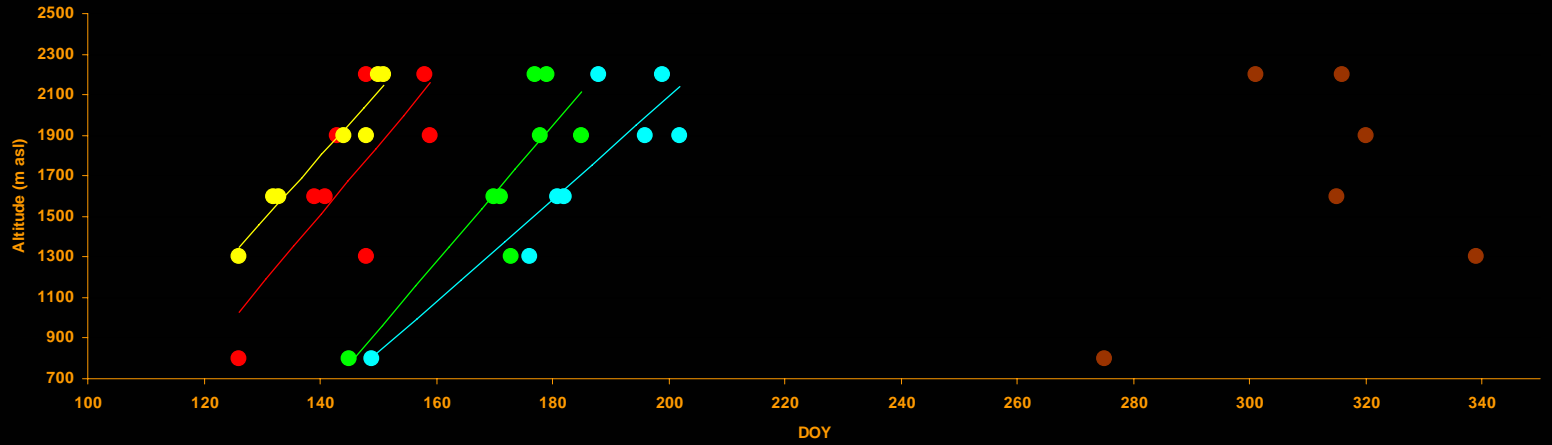
Larix decidua

Similar to spruce

2007



2008

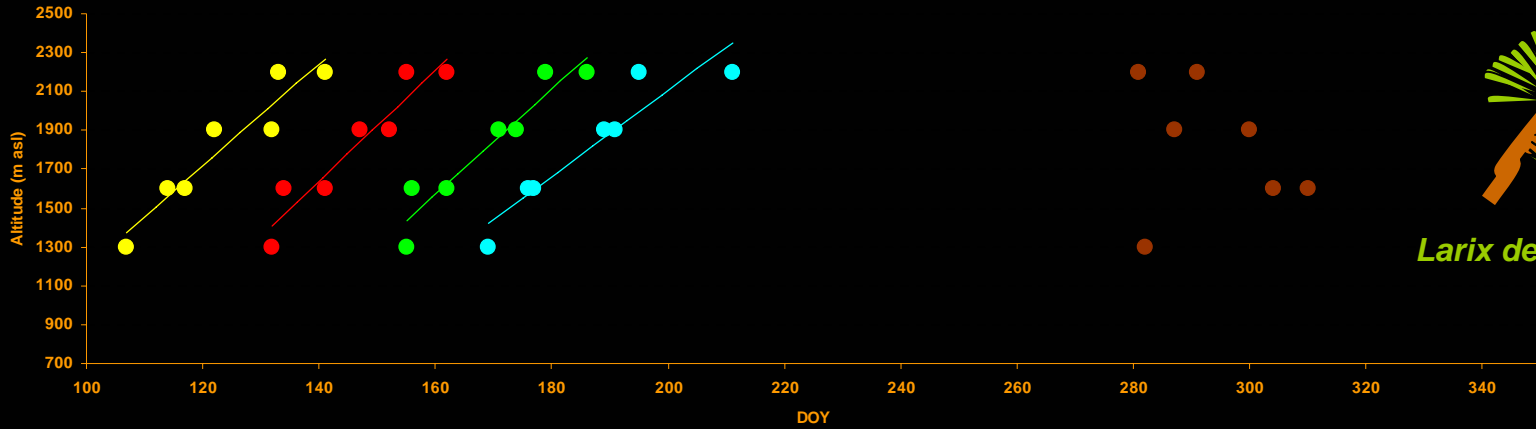


When

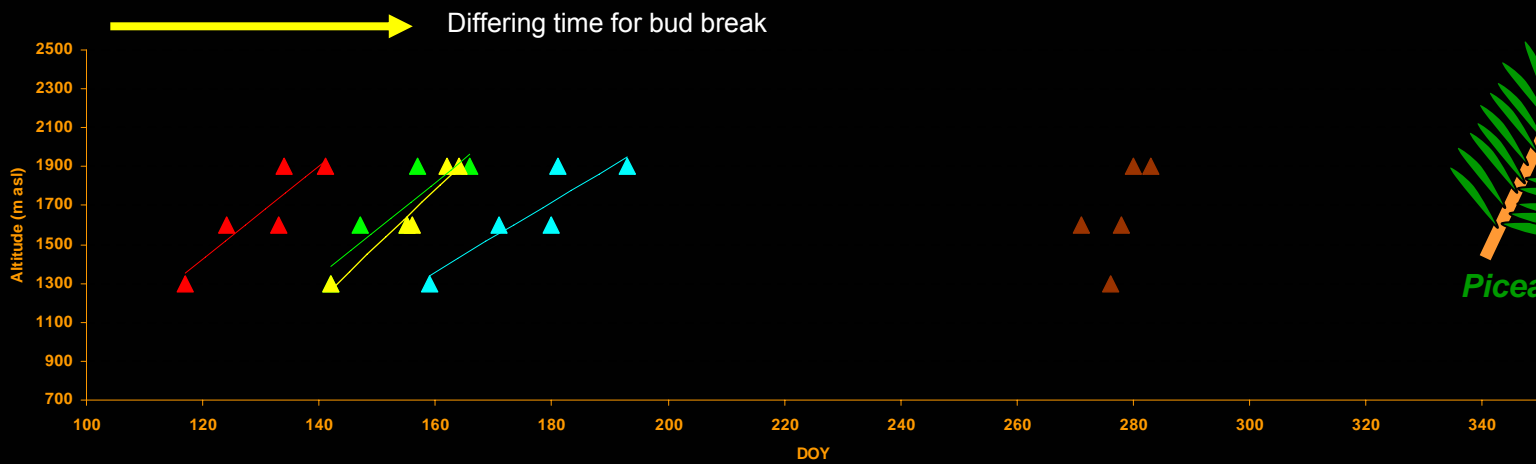
2007

Worlddendro, Rovaniemi, 17 June 2010

Intra-annual cambium dynamics

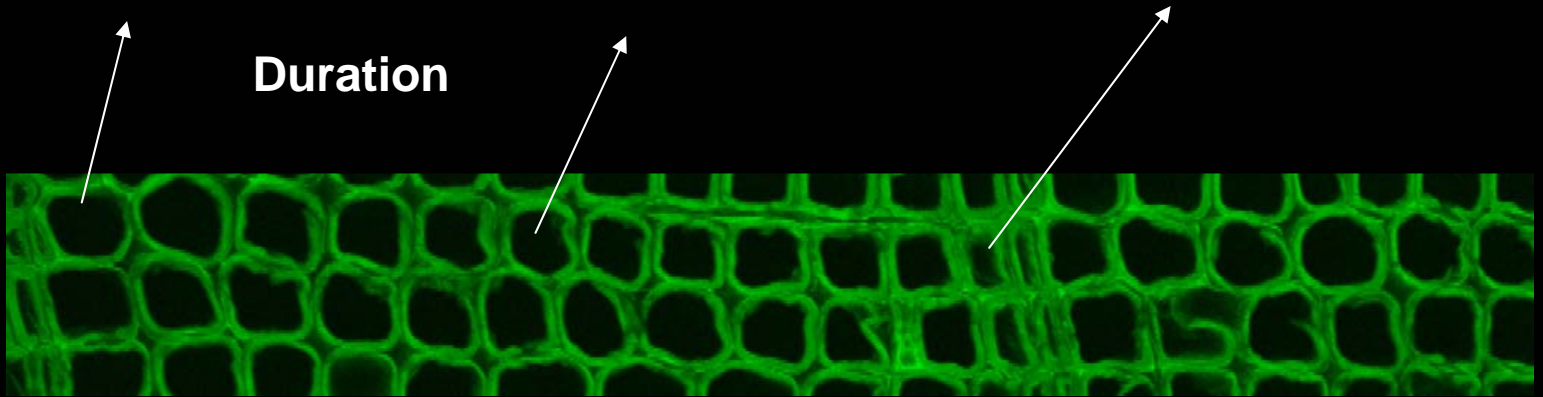


Larix decidua



Picea abies

Thanks for your attention!



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Ferden and Kippel



Ferden



Kippel