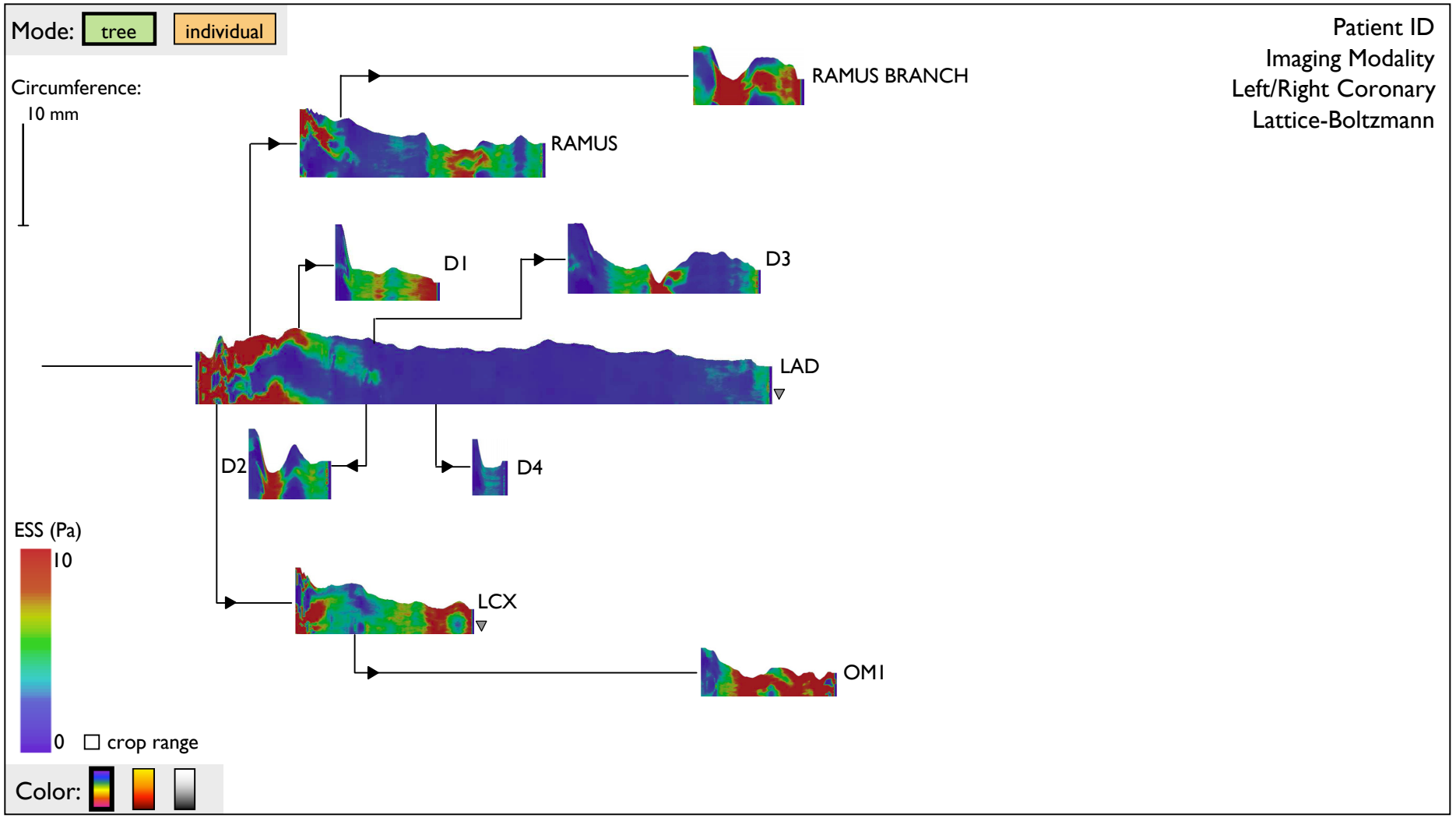
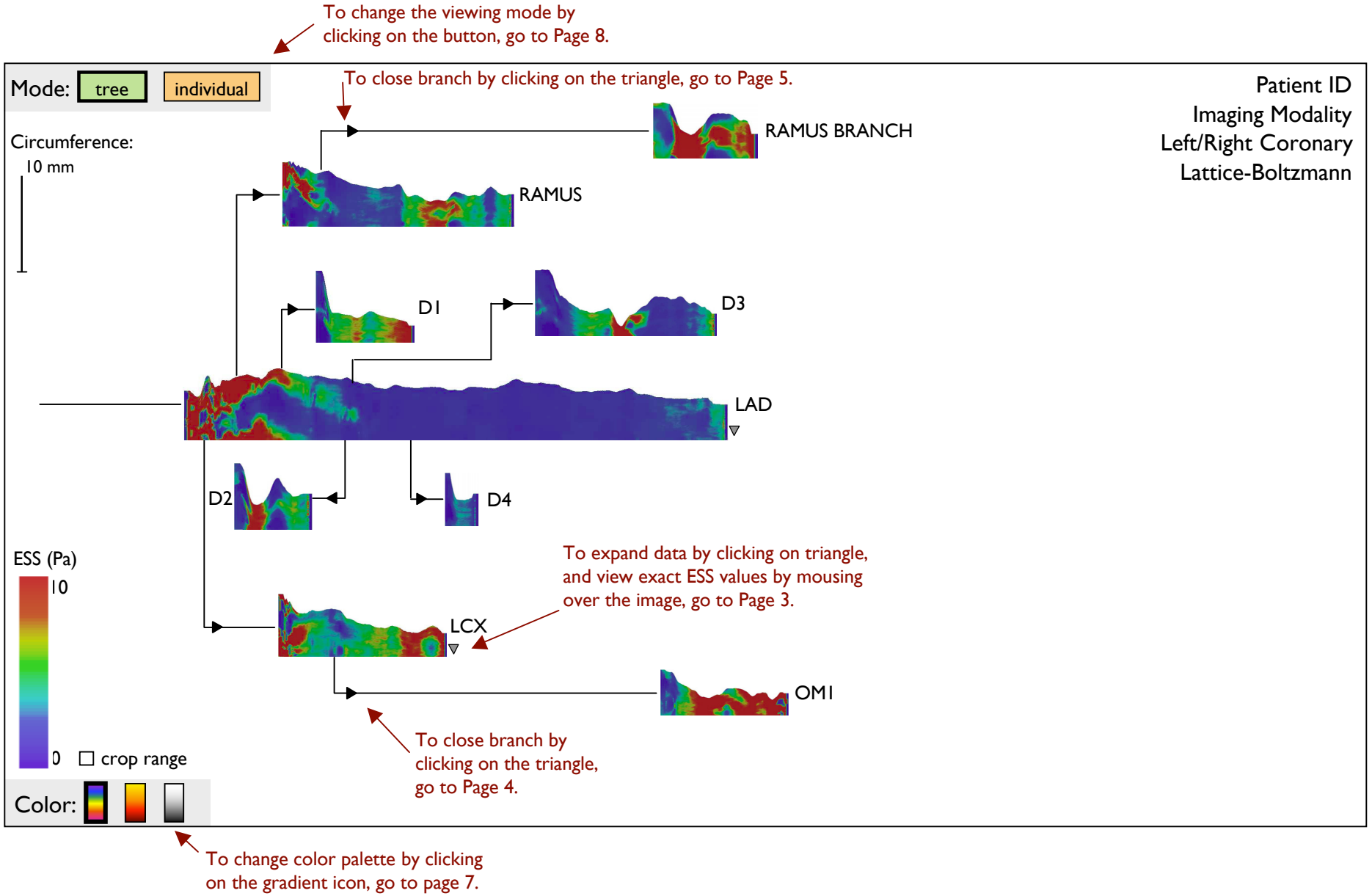
Static Screenshot

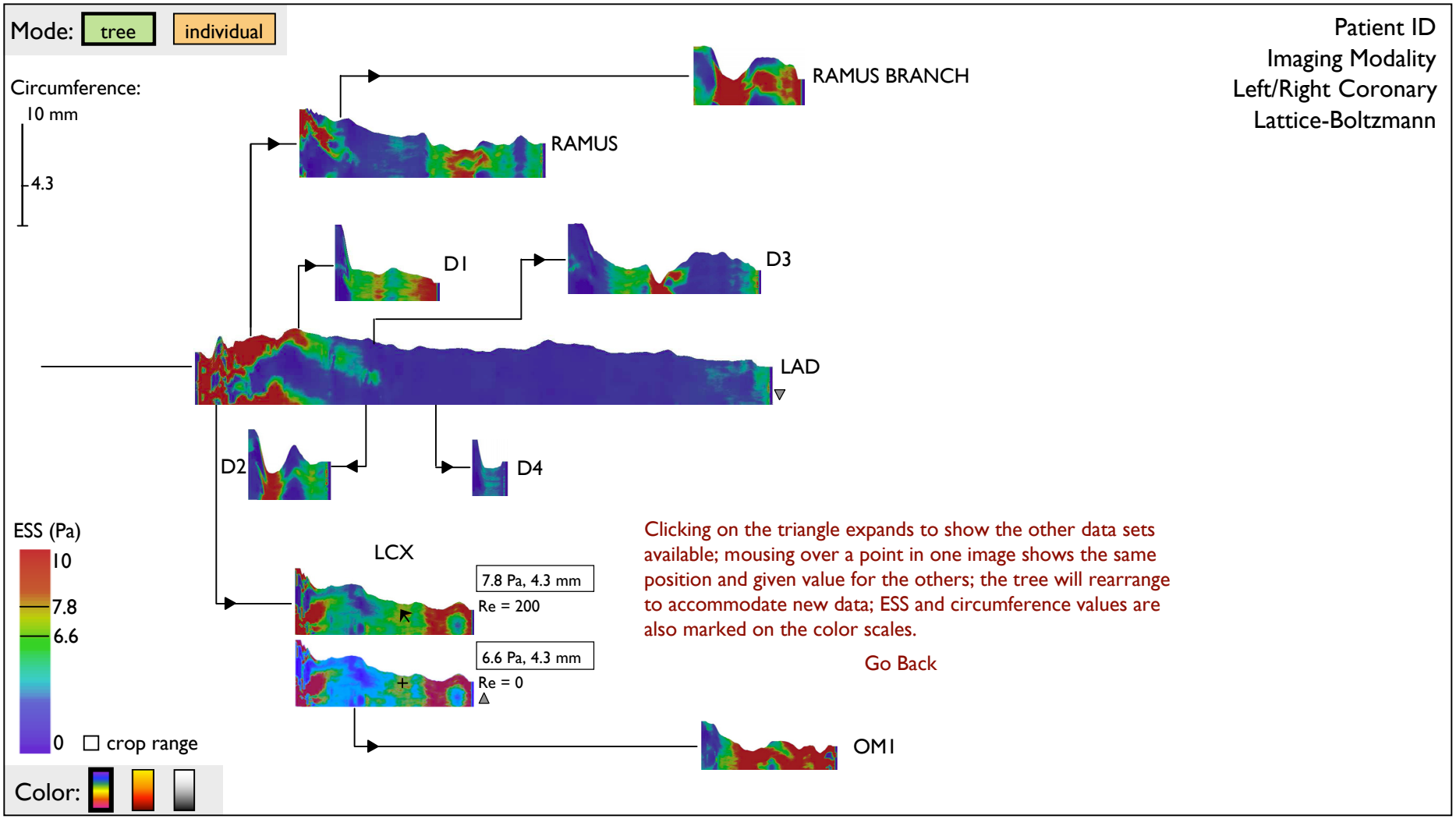


Original Interactive Sketch by Michelle Borkin for HemoVis

Borkin, et al. "Evaluation of Artery Visualizations for Heart Disease Diagnosis", IEEE Transactions on Visualization and Computer Graphics, 17, 12, 2479-2488, 2011.

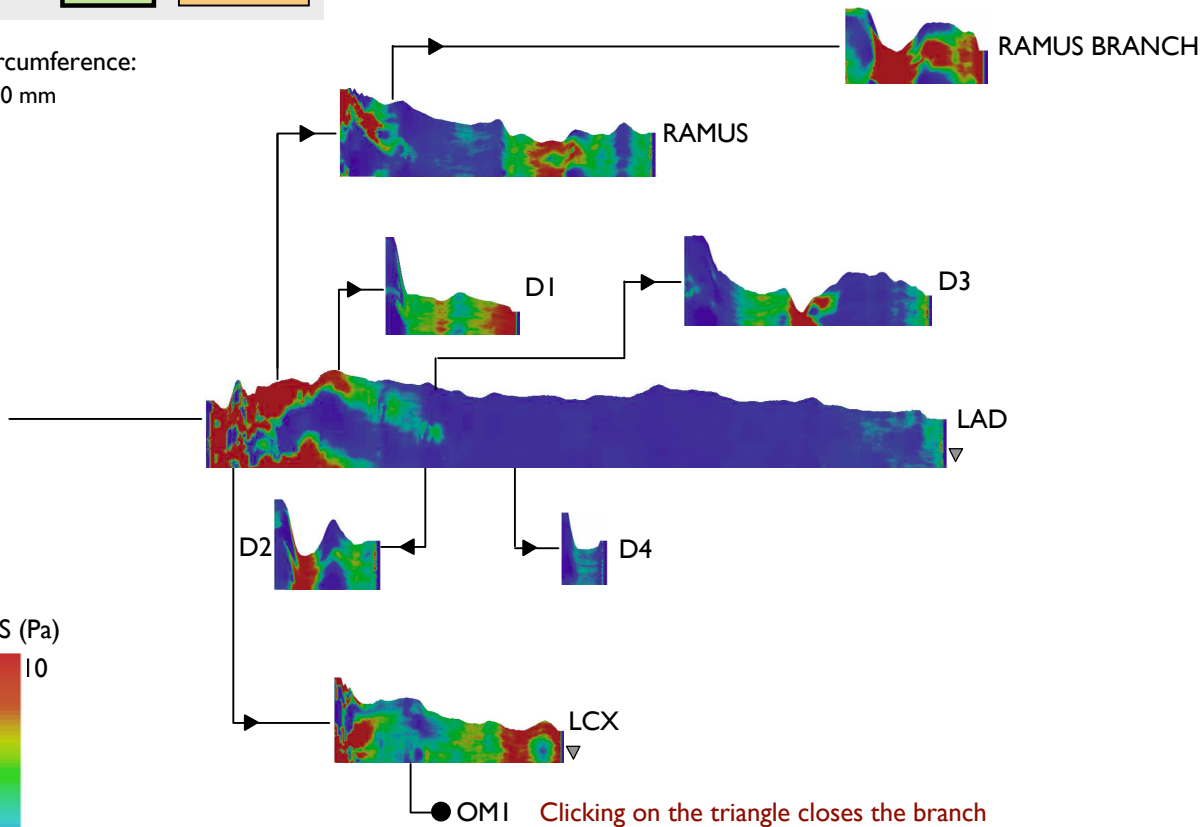
Sample Interactions




Mode:
tree
individual
Patient ID
Imaging Modality
Left/Right Coronary
Lattice-Boltzmann
Circumference:
10 mm
4.3
RAMUS BRANCH
RAMUS
D1
D3
LAD
D2
D4
LCX
7.8 Pa, 4.3 mm
Re = 200
6.6 Pa, 4.3 mm
Re = 0
OM1
ESS (Pa)
10
7.8
6.6
0
crop range
Clicking on the triangle expands to show the other data sets available; mousing over a point in one image shows the same position and given value for the others; the tree will rearrange to accommodate new data; ESS and circumference values are also marked on the color scales.
Go Back
Color:

Mode: tree individual

Circumference:
10 mm



ESS (Pa)
10
0
crop range

Color:

Clicking on the triangle closes the branch and instead represents it as a circle with the artery name.

Go Back

Patient ID
Imaging Modality
Left/Right Coronary
Lattice-Boltzmann

Mode: tree individual

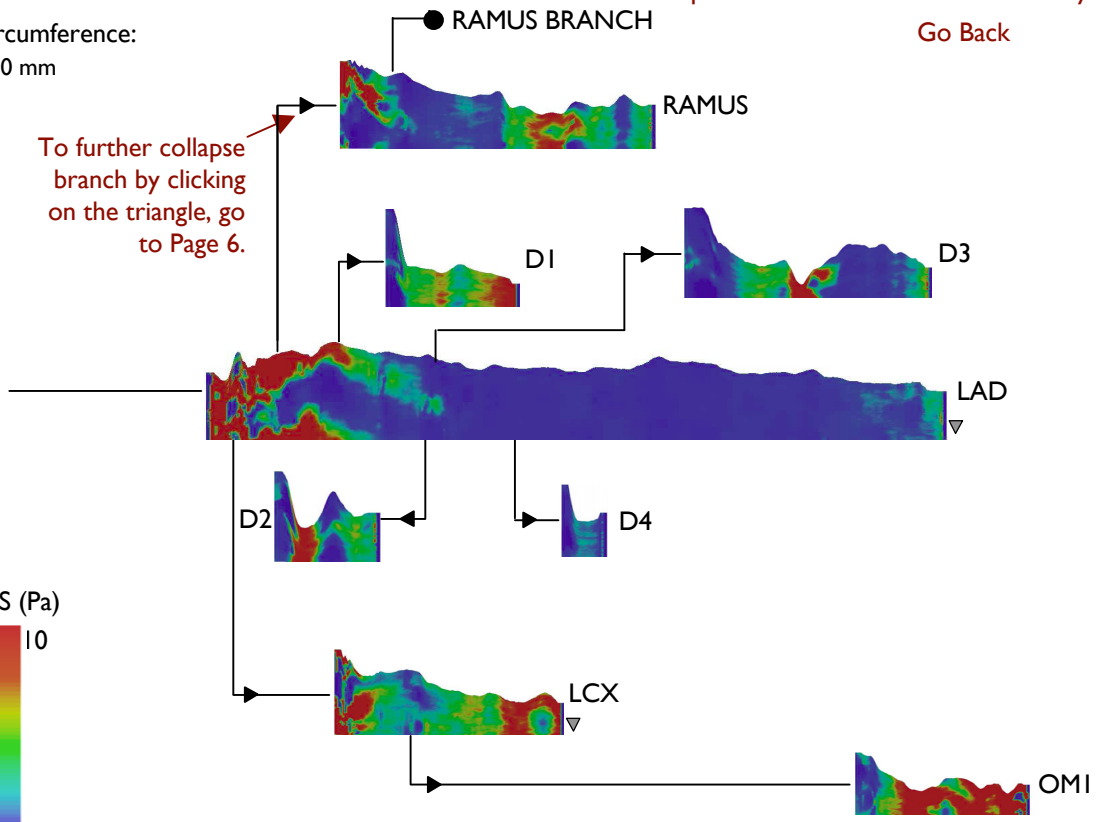
Clicking on the triangle closes the branch and instead represents it as a circle with the artery name.

Go Back

Patient ID
Imaging Modality
Left/Right Coronary
Lattice-Boltzmann

Circumference:
10 mm

To further collapse branch by clicking on the triangle, go to Page 6.



ESS (Pa)
10
0
crop range

Color:

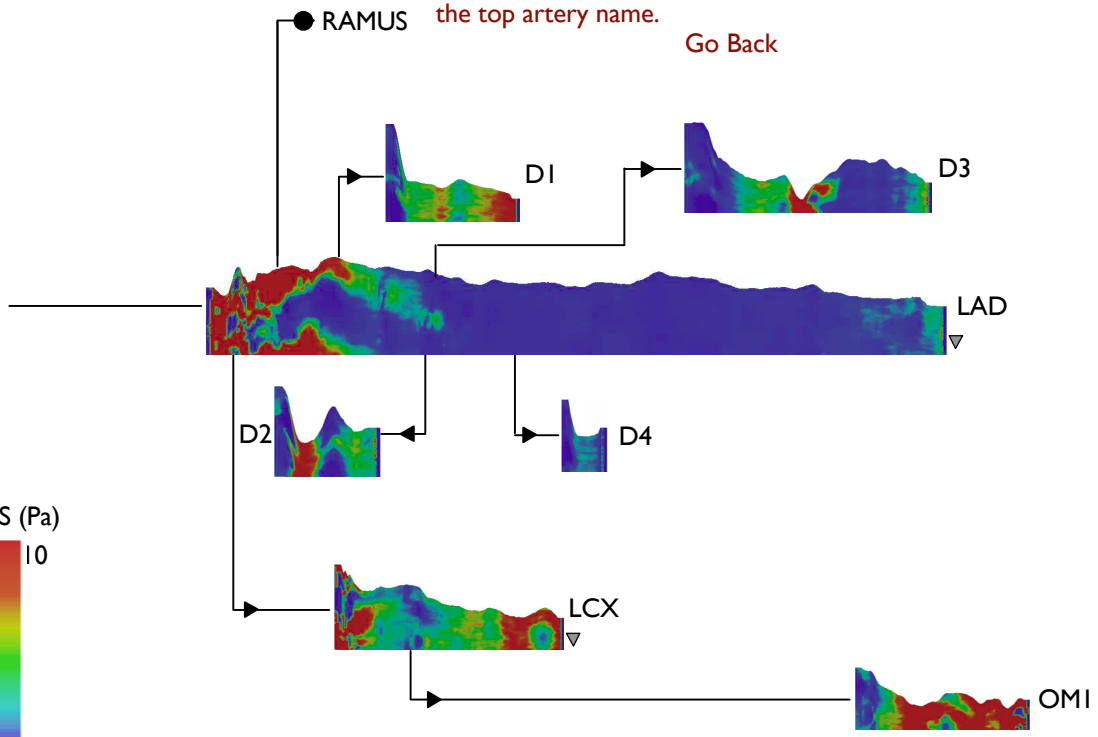
Mode: tree individual

Circumference:

10 mm

Clicking on the triangle closes the branchs and instead represents the highest order structure as a circle with the top artery name.

Go Back



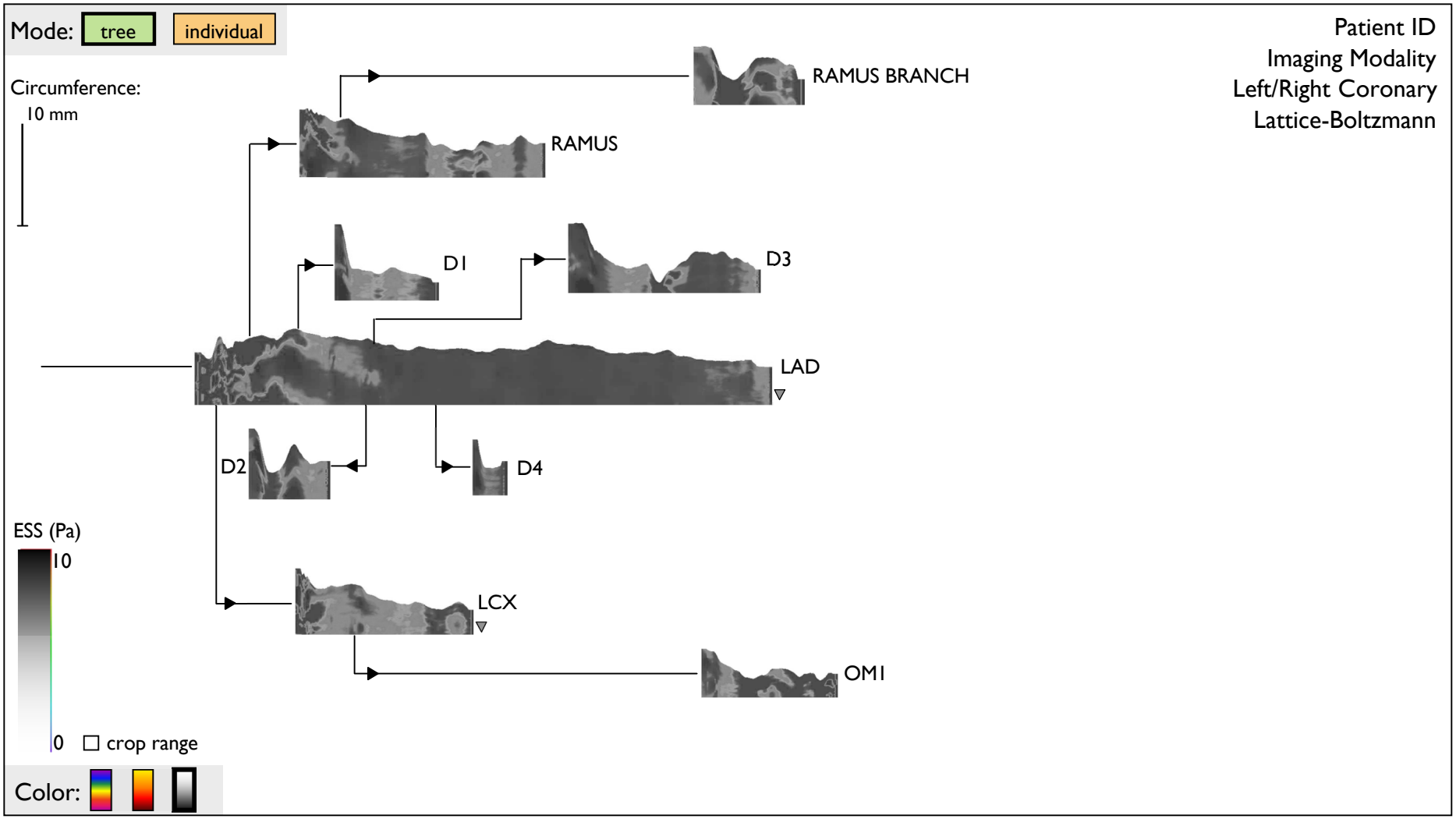
ESS (Pa)

10

0 crop range

Color:

Patient ID
Imaging Modality
Left/Right Coronary
Lattice-Boltzmann



Clicking the icon changes the color palette for all images.

Go Back

Mode: tree individual

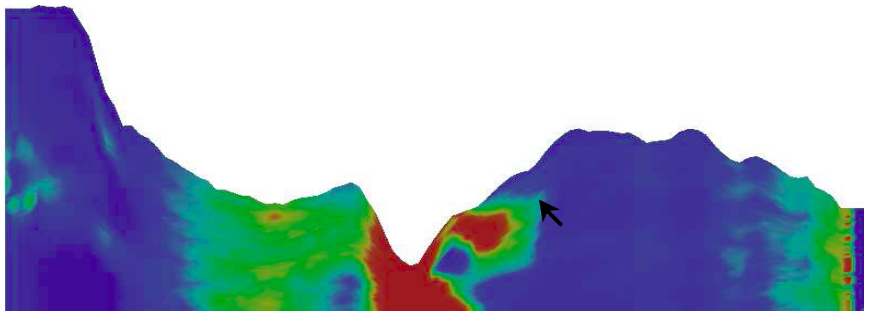
In the "individual" viewing mode, individual branches are selected from the small tree diagram in the lower right. Mousing over the image displays the ESS value to the right of the image as well as on the color scale, and circumference value on the size scale.

Go Back

Patient ID
Imaging Modality
Left/Right Coronary
Lattice-Boltzmann

Circumference:

D3



3.7 Pa, 4.9 mm

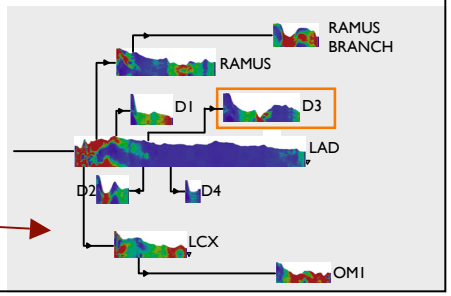
ESS (Pa)

crop range

To crop the range of visible colors, go to Page 9.

Color:

To select a different artery by clicking on the image, go to Page 10.

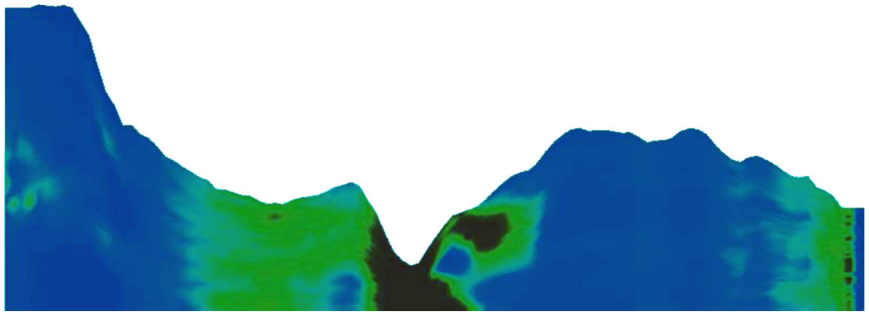


Mode: tree individual

Patient ID
Imaging Modality
Left/Right Coronary
Lattice-Boltzmann

Circumference:
10 mm

D3

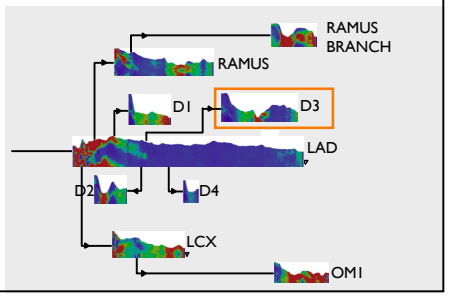


ESS (Pa)
10
4.8
0
☒ crop range

By clicking the "crop range" box, one can drag the ends of the transparent box to view only a specific range of values (the others are darkened on the color scale and masked in the image).

Go Back

Color:



Mode: tree individual

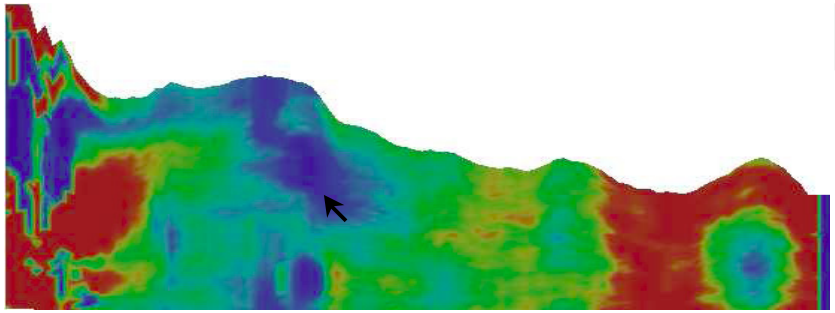
Patient ID
Imaging Modality
Left/Right Coronary
Lattice-Boltzmann

Circumference:

10 mm

7.3

LCX



2.1 Pa, 7.3 mm

To expand the other available data sets for this artery by clicking on the triangle, go to Page 11.

ESS (Pa)

10

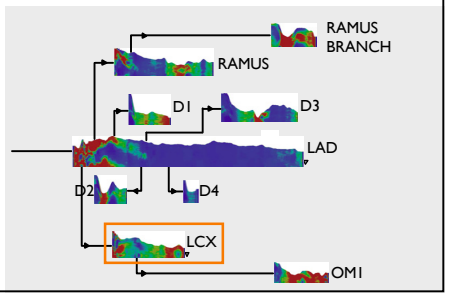
2.1

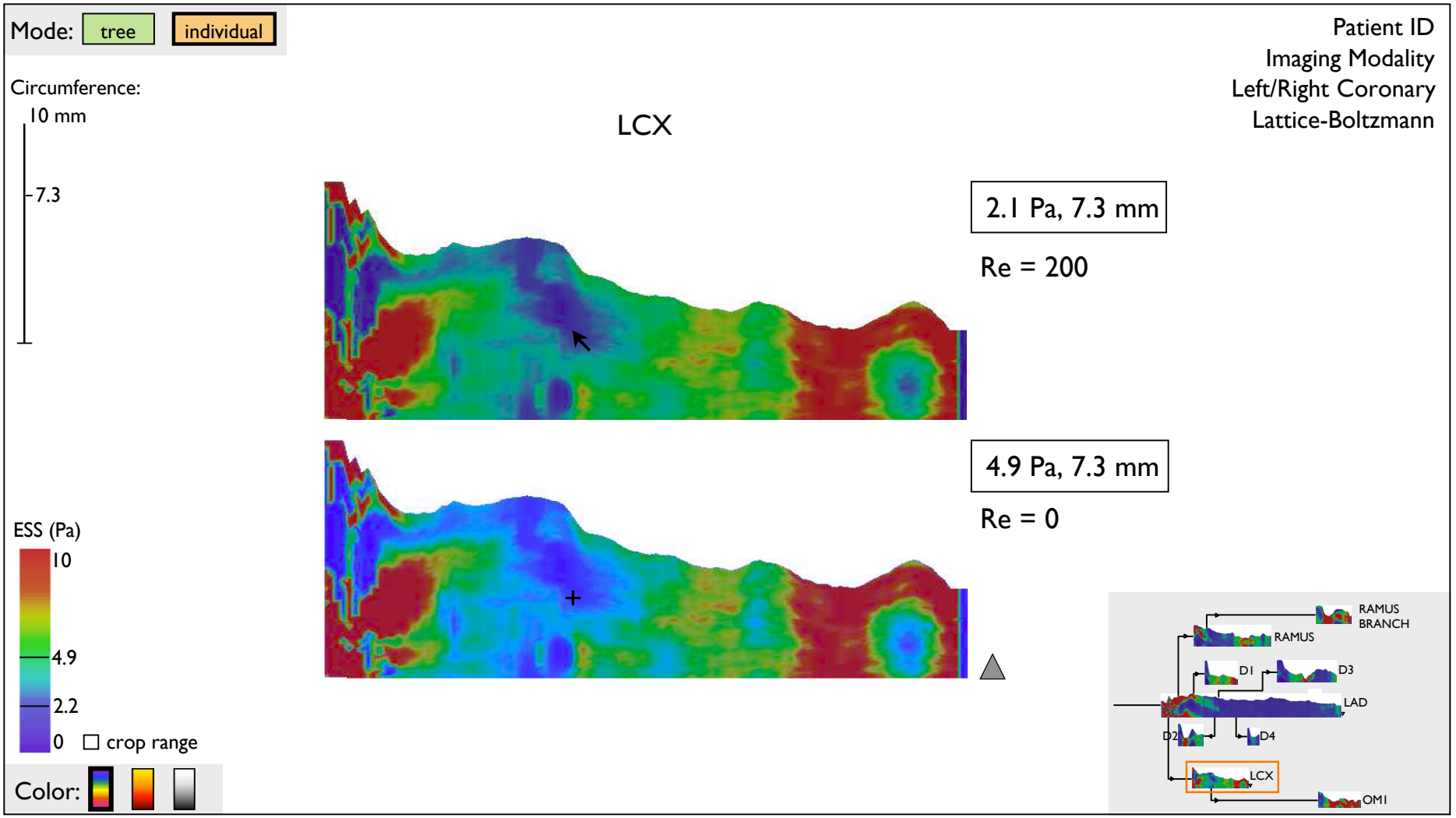
0 ☐ crop range

Color:

The newly selected branch is now displayed in the main window and one is able to mouse over for ESS values.

Go Back



The expanded data is now displayed; mousing over one image displays a cursor over the equivalent spot and its ESS value (these values are also marked on the color scale) as well as the circumference value. One can collapse the data by clicking again on the triangle.

Go Back