OSCAR-MP: Quality Control for OCT Angiography

Training set (v1)

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Training Set

OSCAR-MP criteria

- Please read the scoring guide OSCAR-MP: Quality Control for OCT Angiography before performing the training set
- The OCT-A images are derived from a Heidelberg Engineering OCT2 with angio module. Here, a Q value of ≥ 30 is considered as sufficient
- For the current OCT-A training set, please consider the whole en face image as region of interest (ROI)
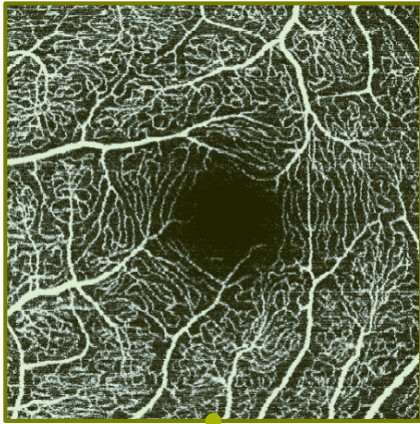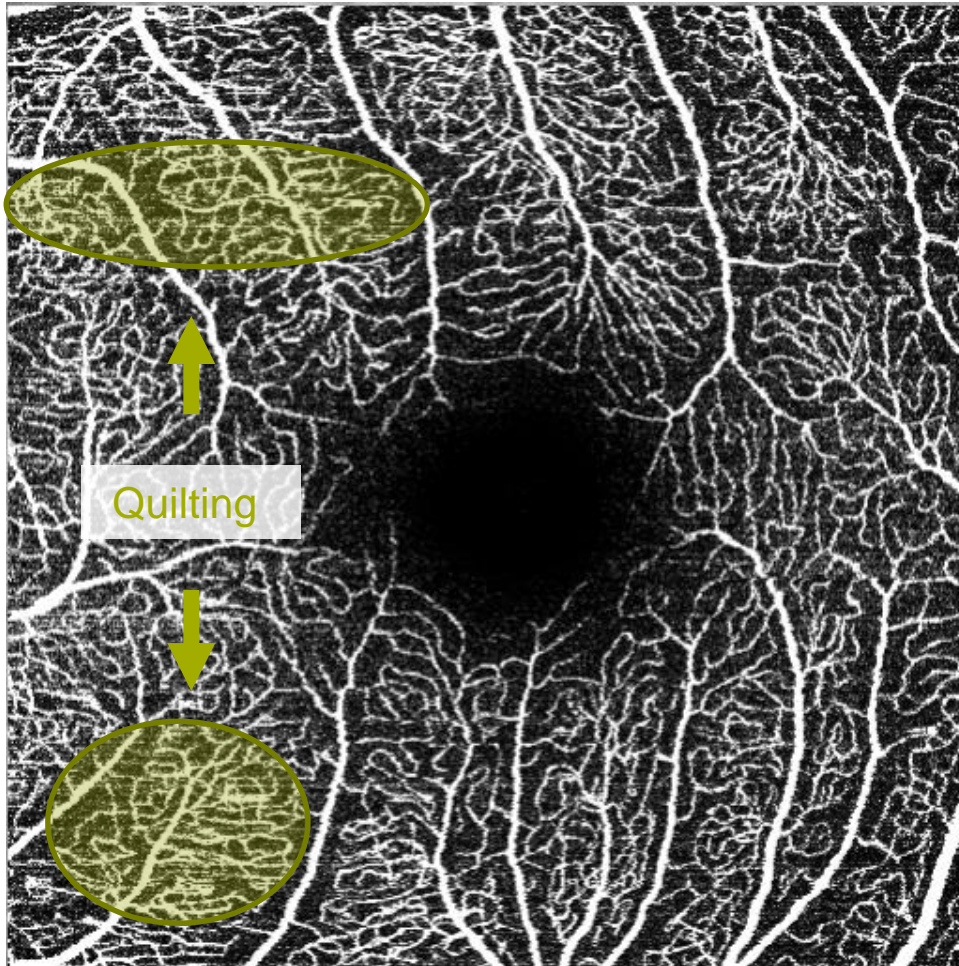

ROI = macular OCT-A image
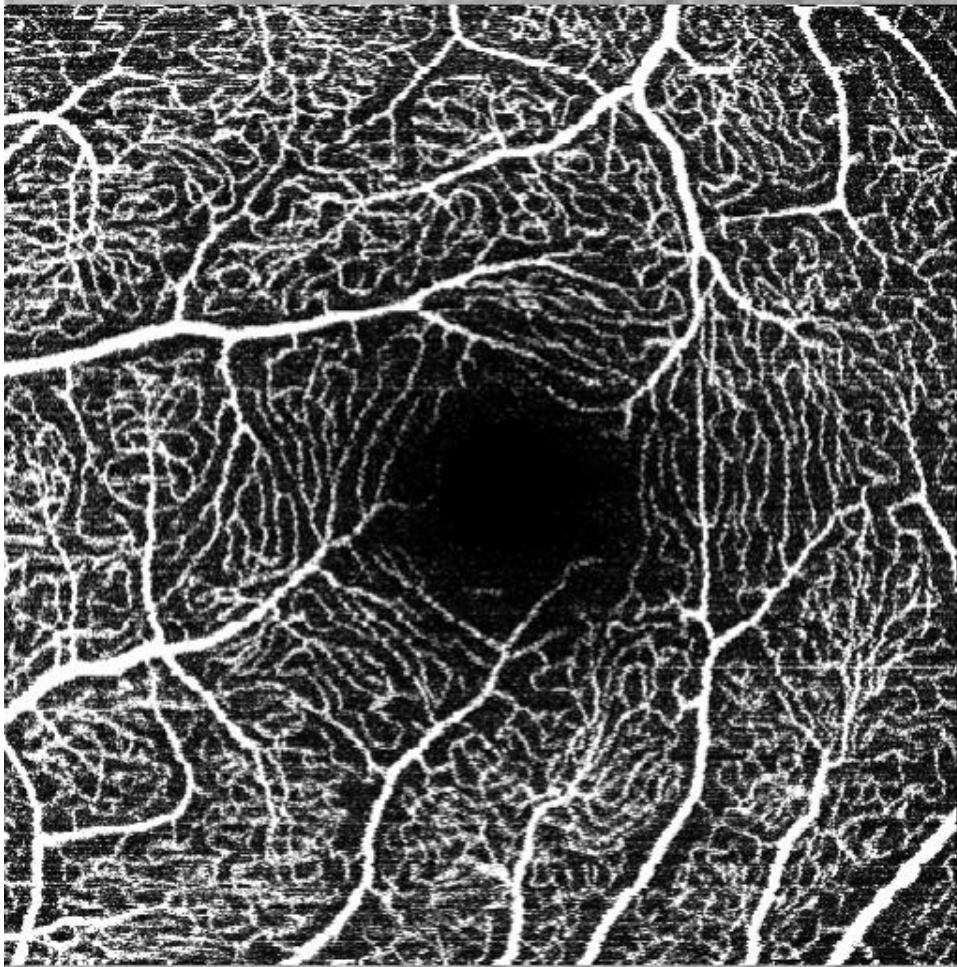
Example 1
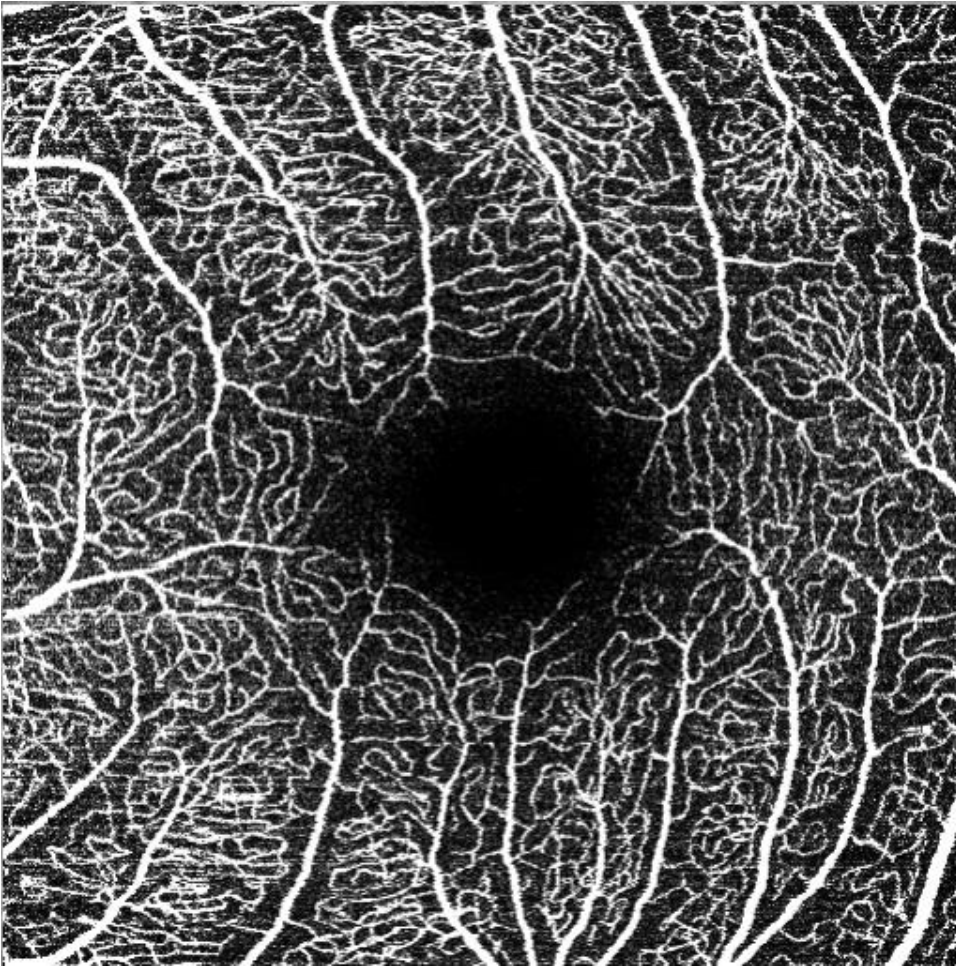
Q value 39

Example 1: QC passed

O:	✓
S:	✓
C:	✓
A:	✓
R:	✓
M:	≤25%
P:	✓

Q value 39

Example 2

Q value 42

Example 2: QC passed

Quilting

Minimal vessel displacements
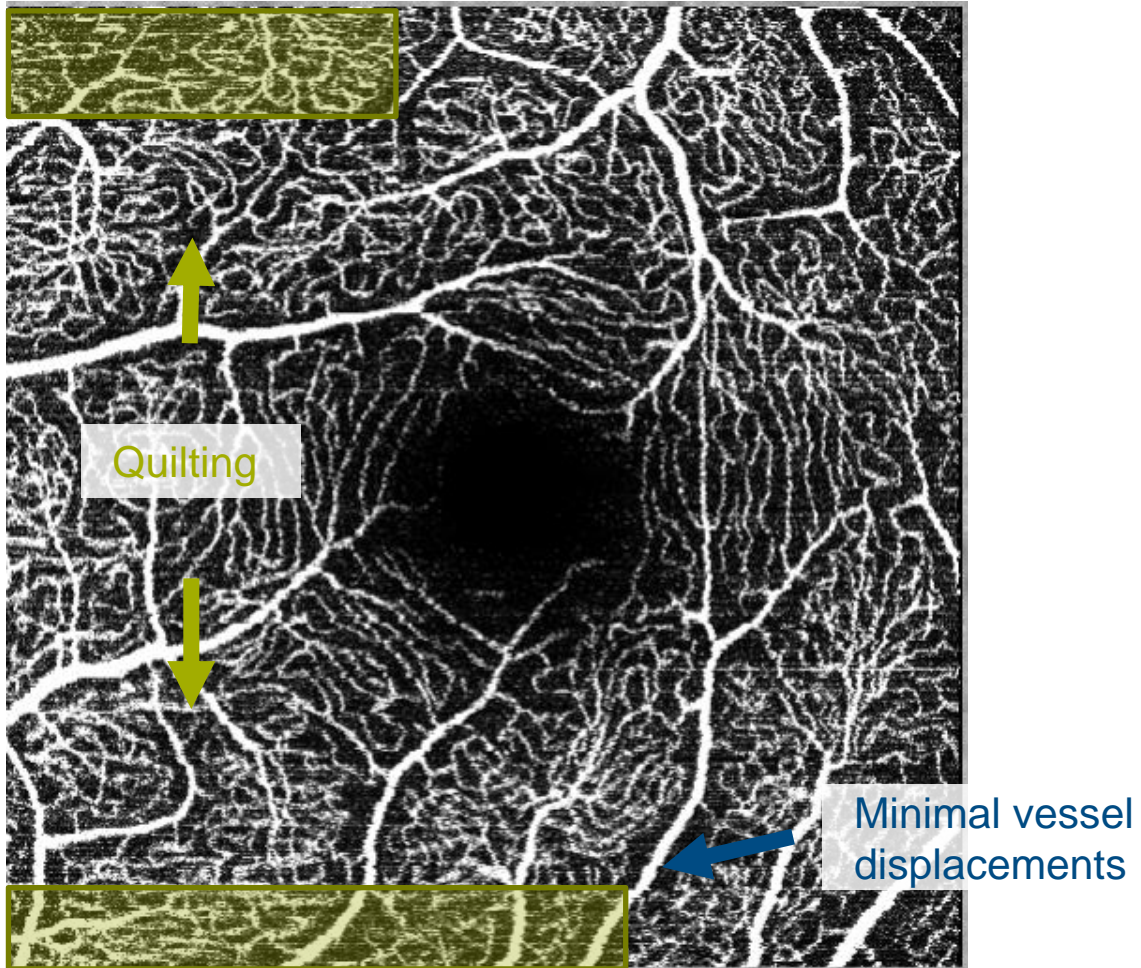
Q value 42

O:	✓
S:	✓
C:	✓
A:	✓
R:	✓
M:	≤25%
P:	✓

Example 3
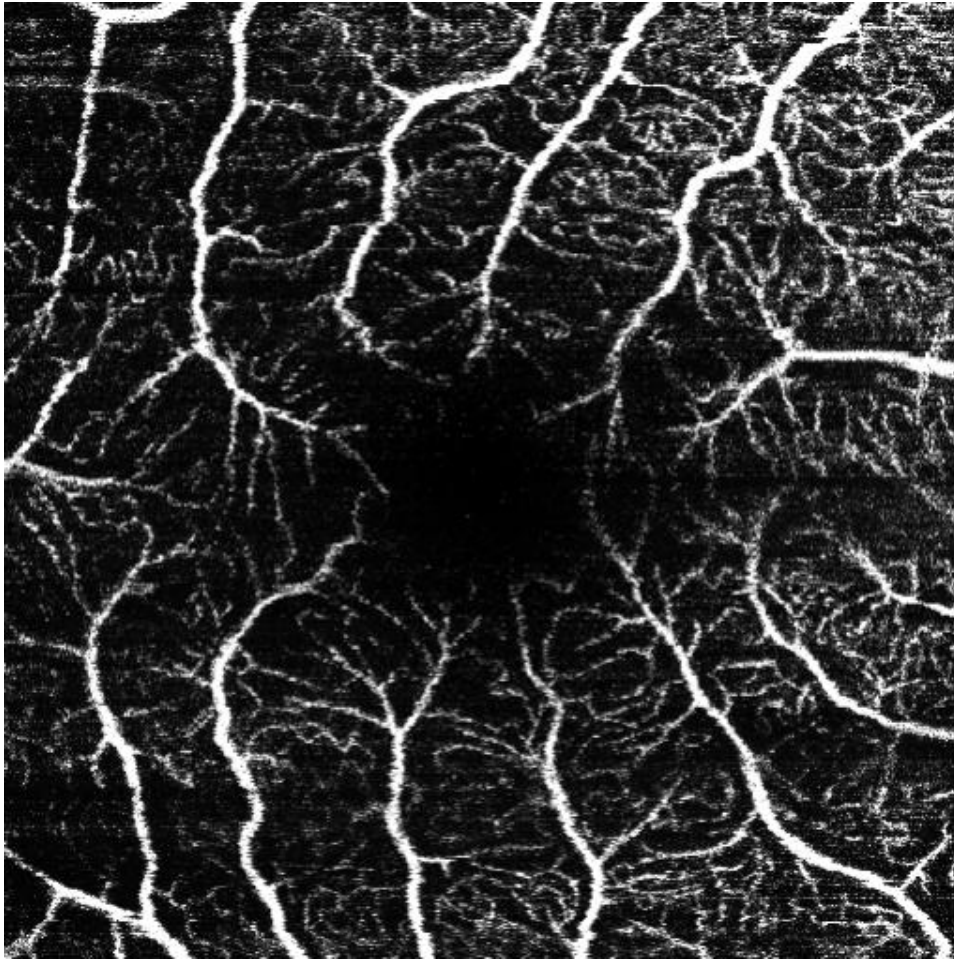
Q value 32

Example 3: QC failed

Tilting

Stretching

Blink lines

Vessel displacement
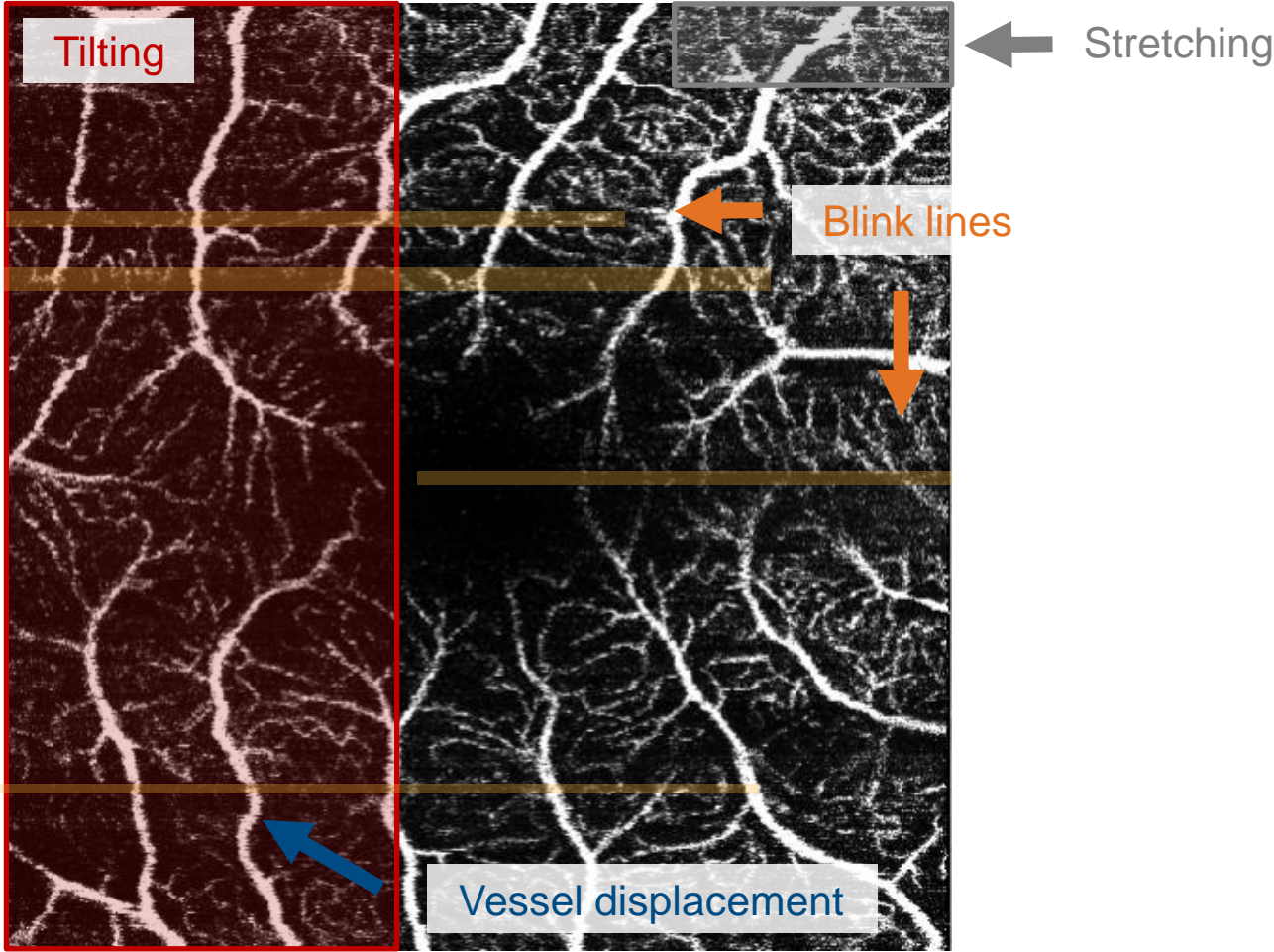
Q value 32

O:	Tilting (+ Defocus)
S:	✓
C:	✓
A:	✓
R:	✓
M:	>25%
P:	✓
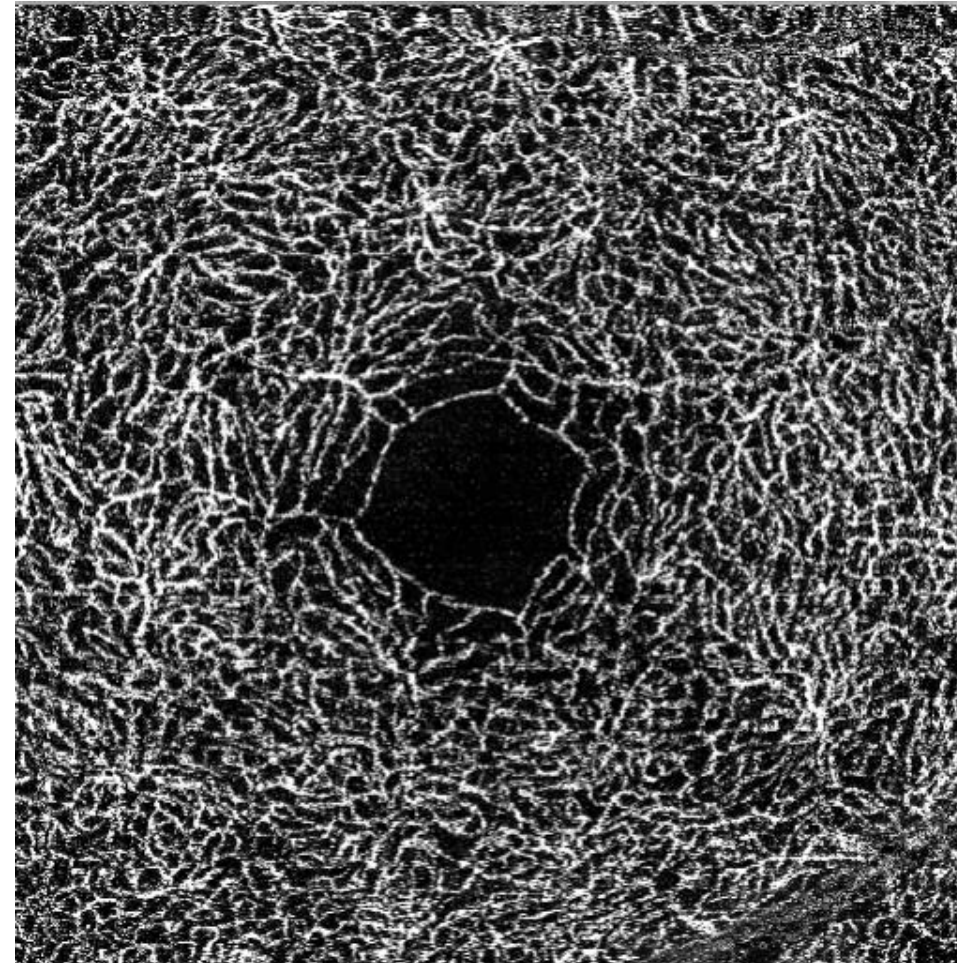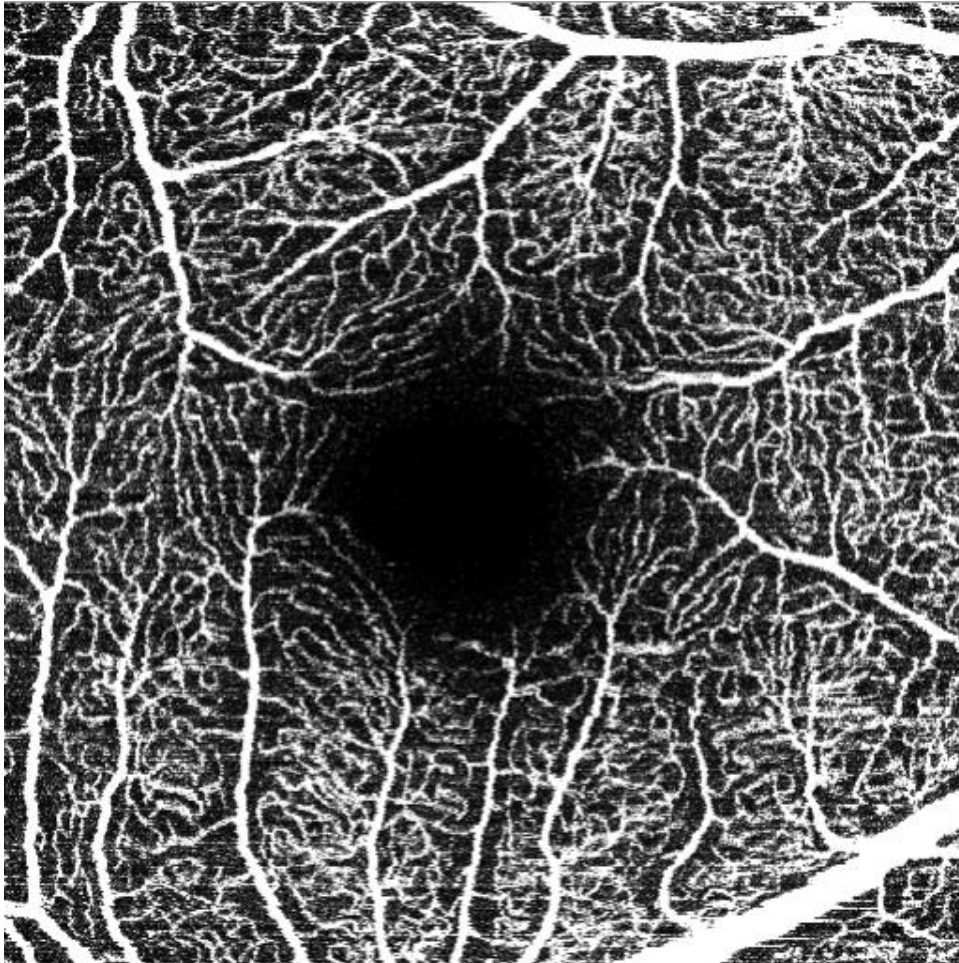
Example 4

Q value 34

Example 4: QC failed
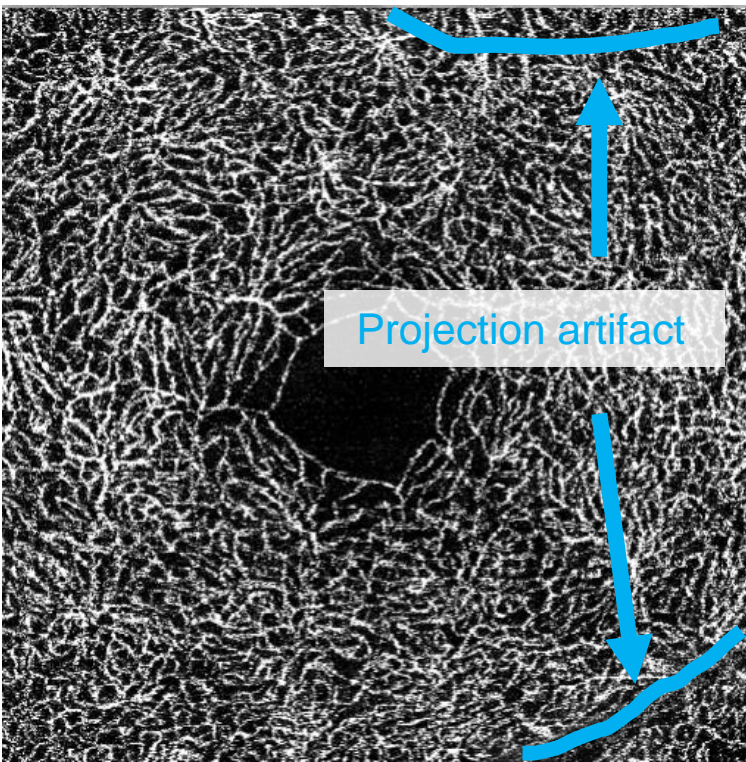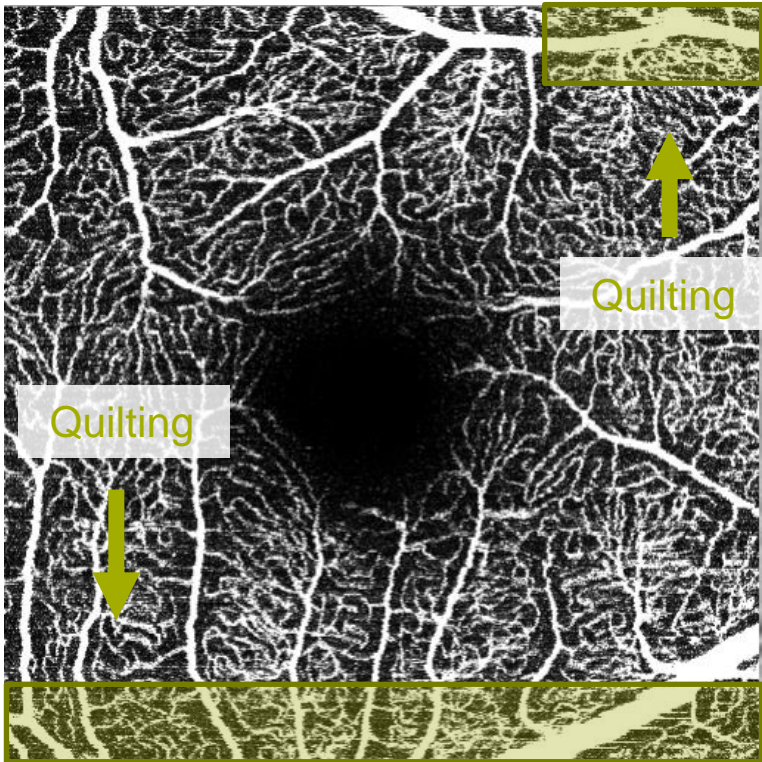
O:		✓
S:		✓
C:		✓
A:		✓
R:		✓
M:		≤25%
P:		Projection artifact

Q value 34

Example 5
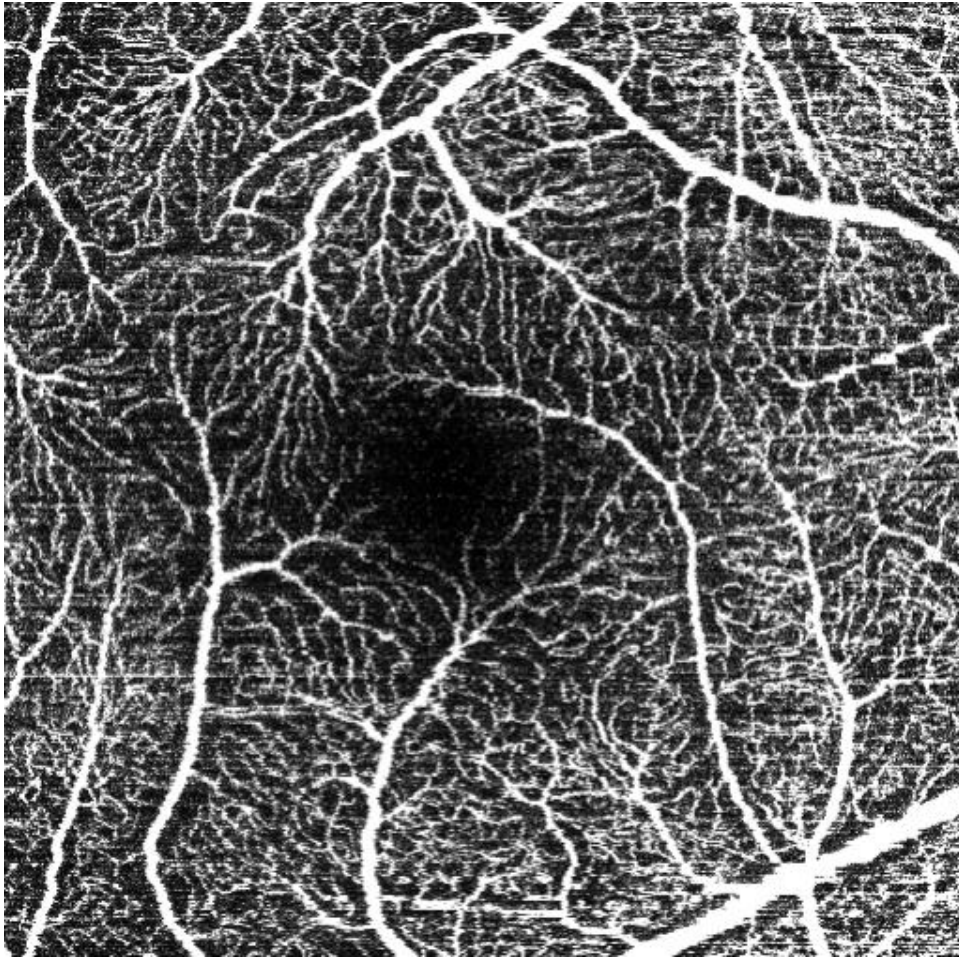
Q value 38

Example 5: QC failed
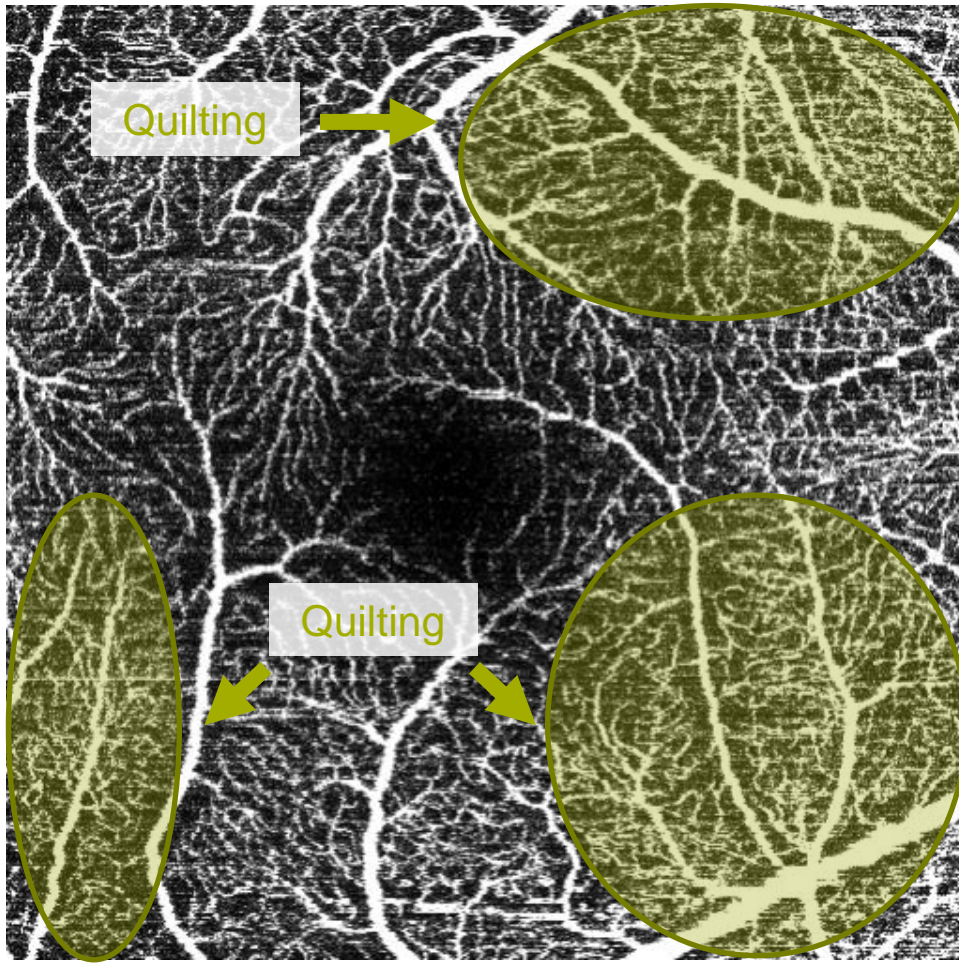
Q value 38

O:	✓
S:	✓
C:	✓
A:	✓
R:	✓
M:	>25%
P:	✓

Example 6
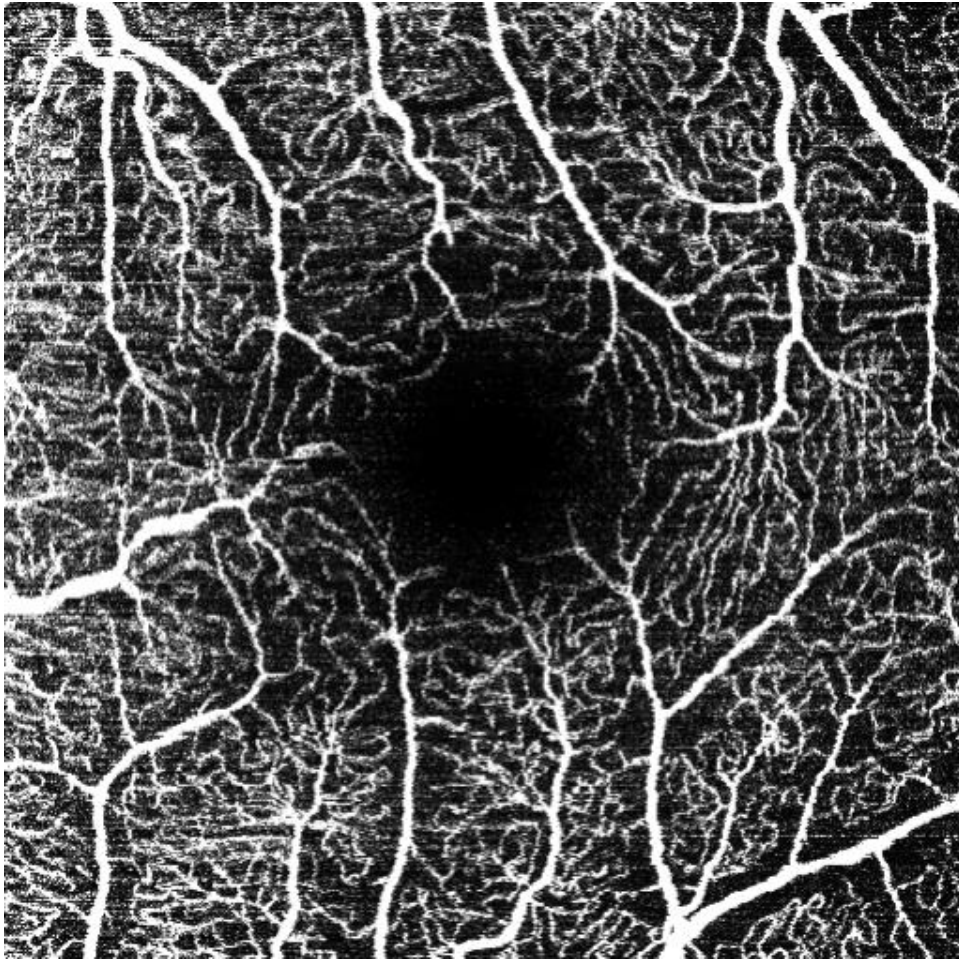
Q value 40

Example 6: QC passed

Stretching

Quilting
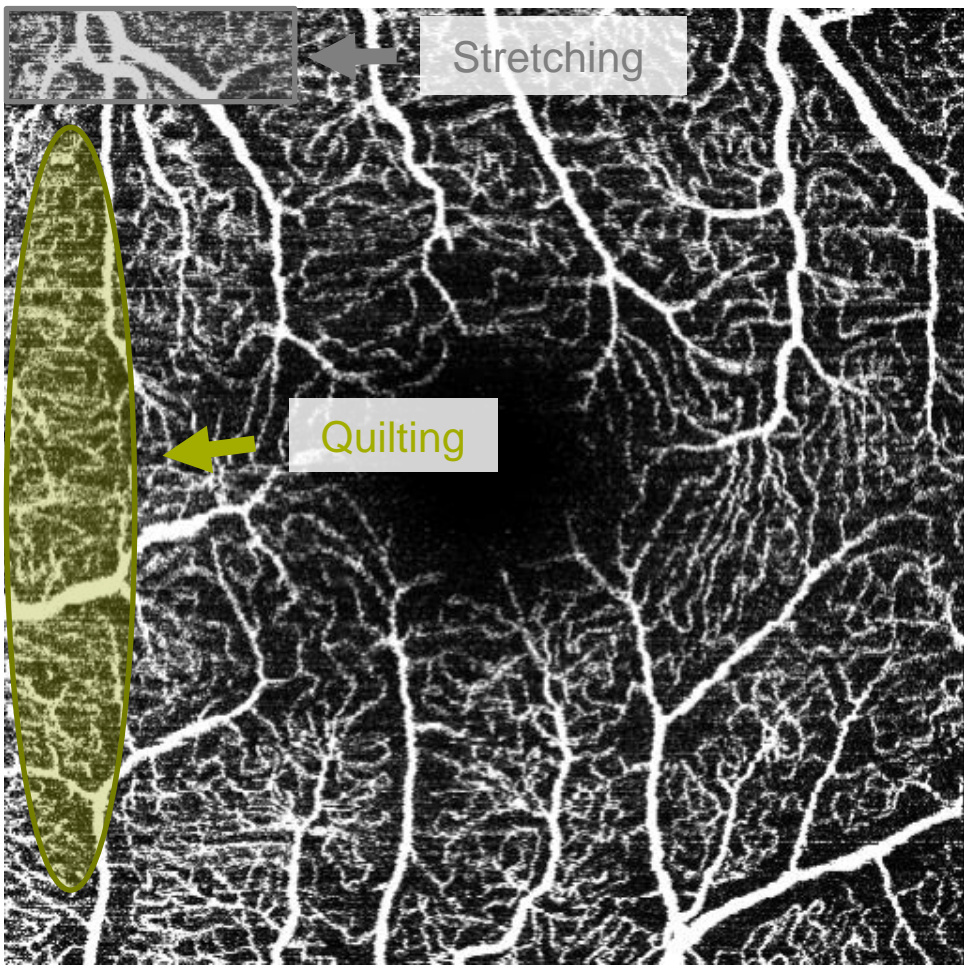
O:	✓
S:	✓
C:	✓
A:	✓
R:	✓
M:	≤25%
P:	✓

Q value 40

Example 7
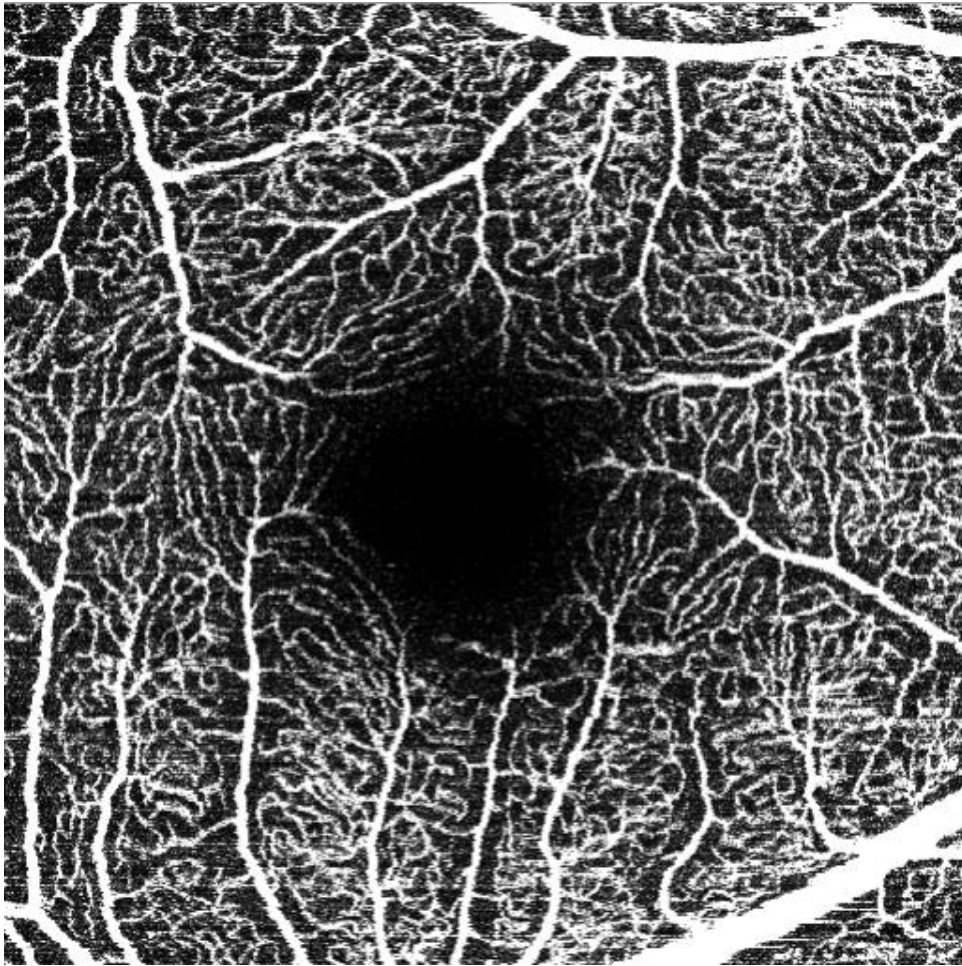
Q value 39

Example 7: QC passed

Quilting

Q value 39

O:	✓
S:	✓
C:	✓
A:	✓
R:	✓
M:	≤25%
P:	✓

Example 8

Q value 28

Example 8: QC failed
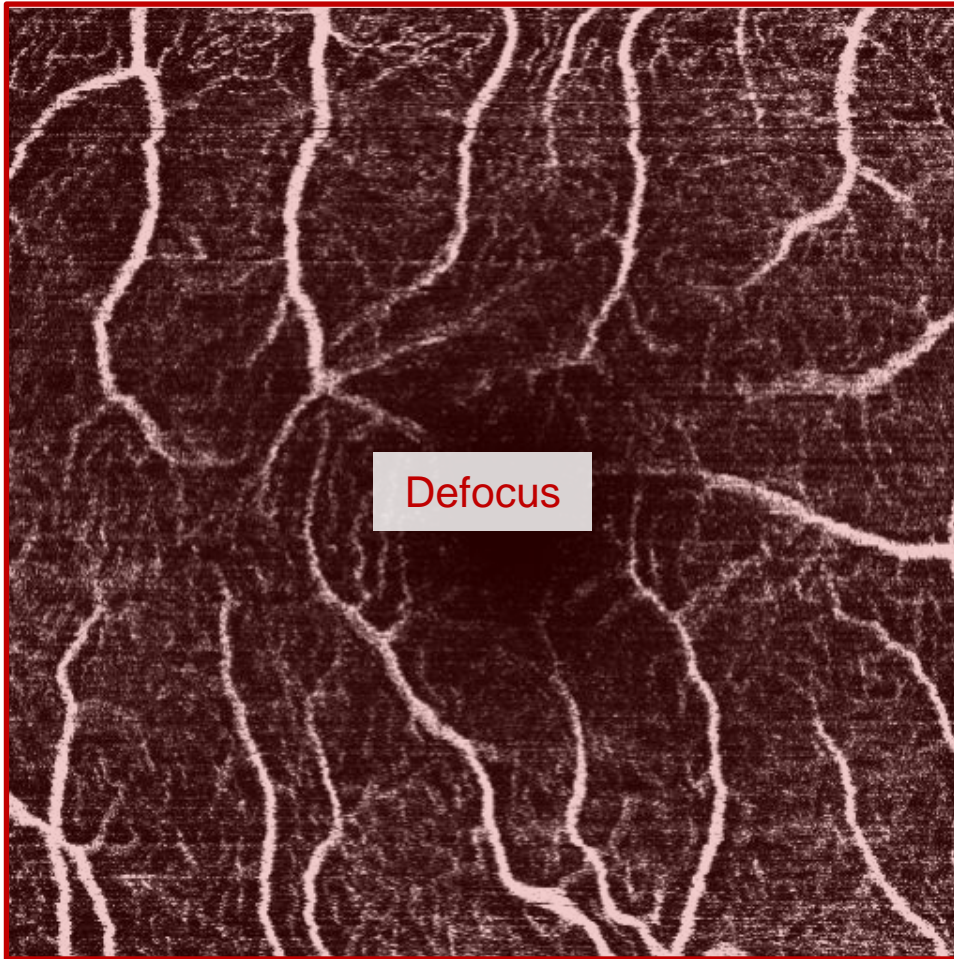
Defocus

Q value 28

O:	Defocus
S:	Q<30
C:	✓
A:	✓
R:	✓
M:	>25%*
P:	✓

* If severe defocus occurs: It is very difficult to differentiate between pure motion artifacts and defocus. However, significant motion artifacts are very probable in defocused OCTA images

Example 9
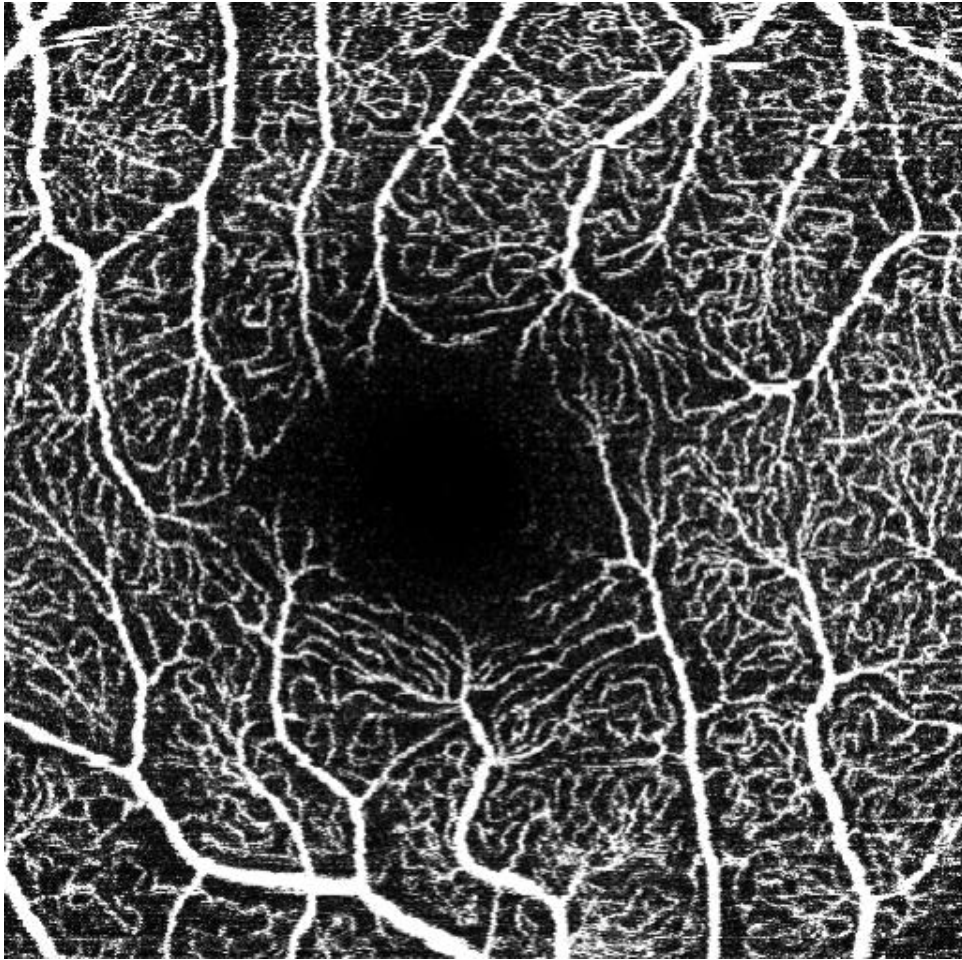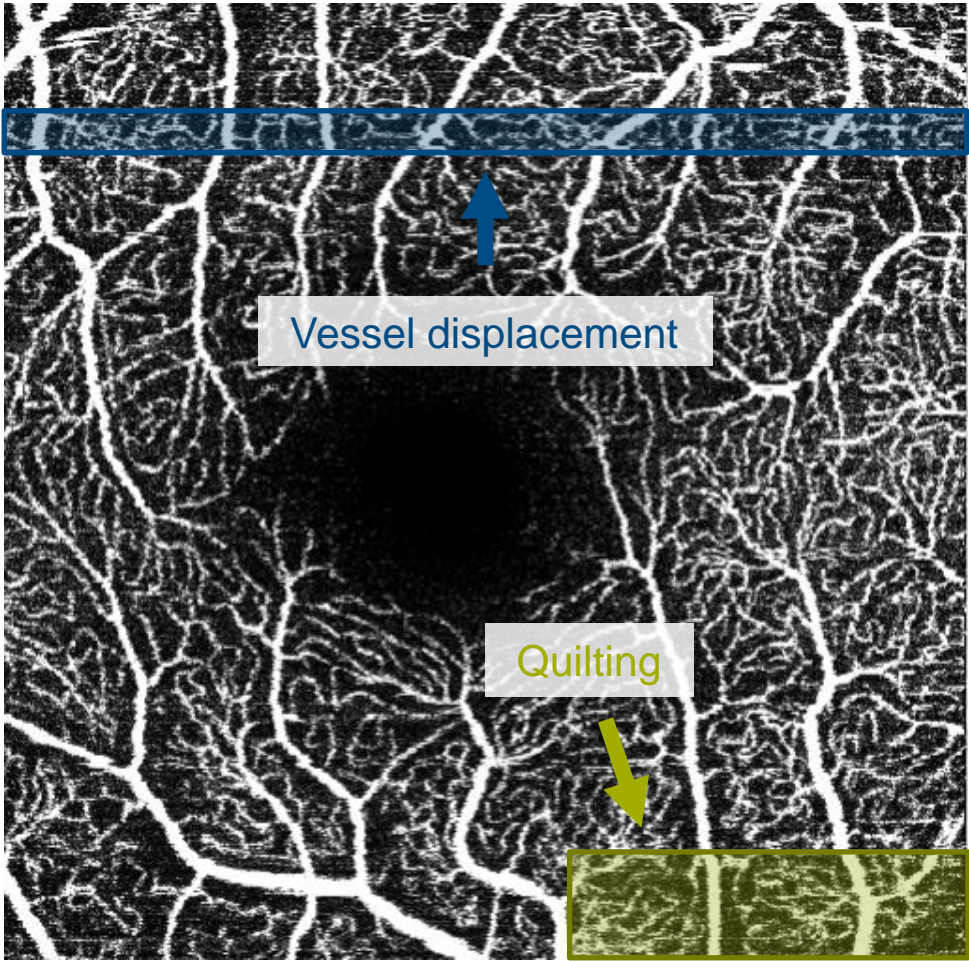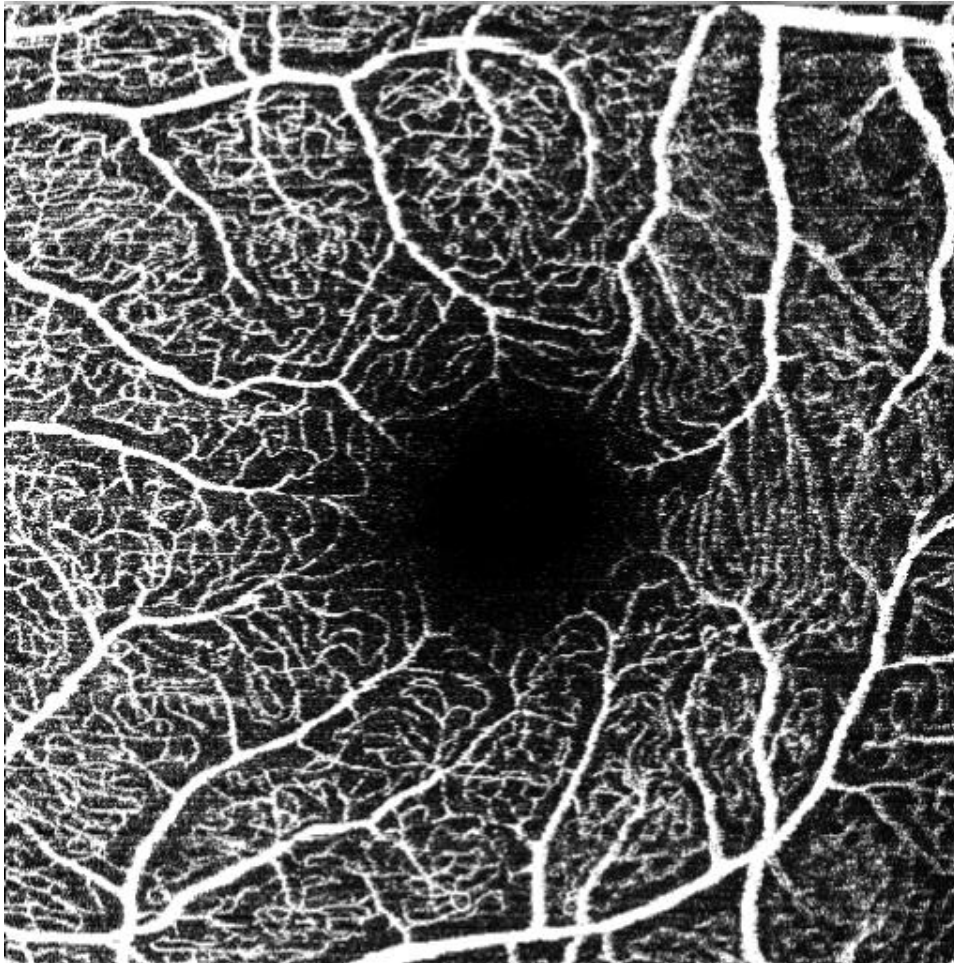

Q value 39

Example 9: QC passed

Vessel displacement

Quilting

Q value 39

O:	✓
S:	✓
C:	✓
A:	✓
R:	✓
M:	≤25%
P:	✓

Example 10

Q value 42

Example 10: QC failed

Stretching
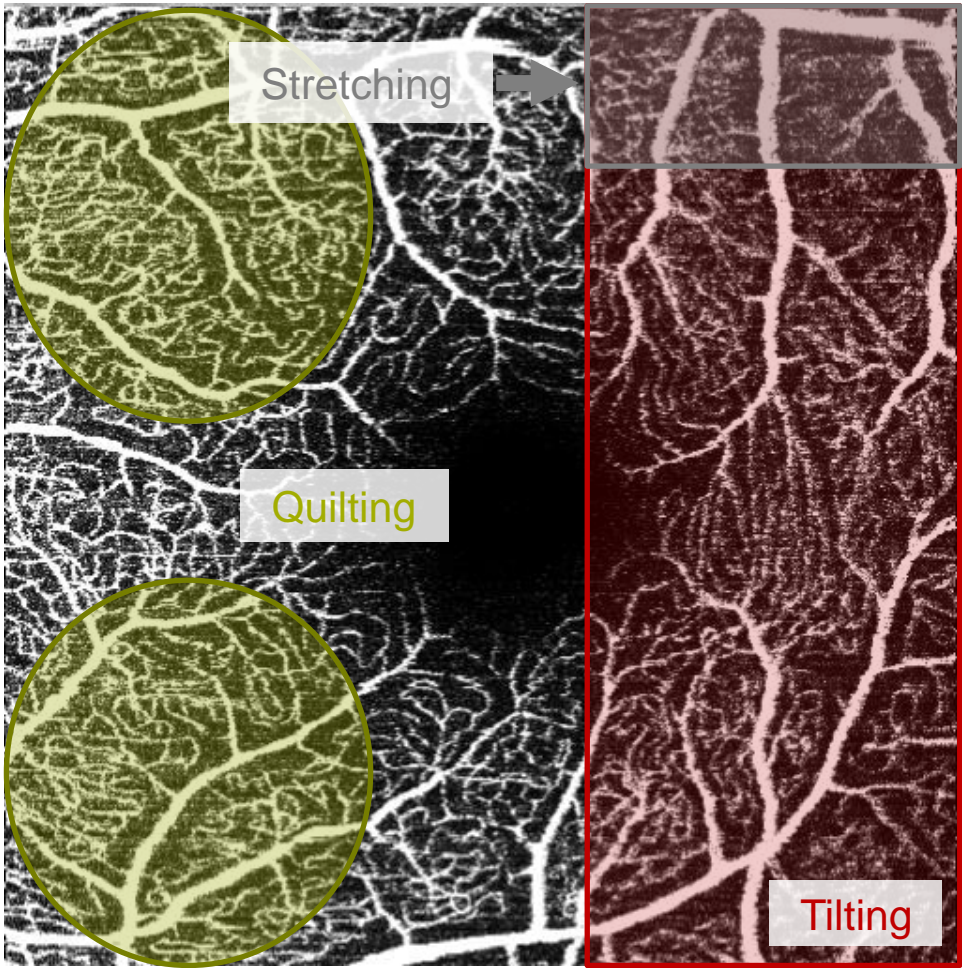
Quilting

Tilting

Q value 42

O:	Tilting
S:	✓
C:	✓
A:	✓
R:	✓
M:	>25%
P:	✓
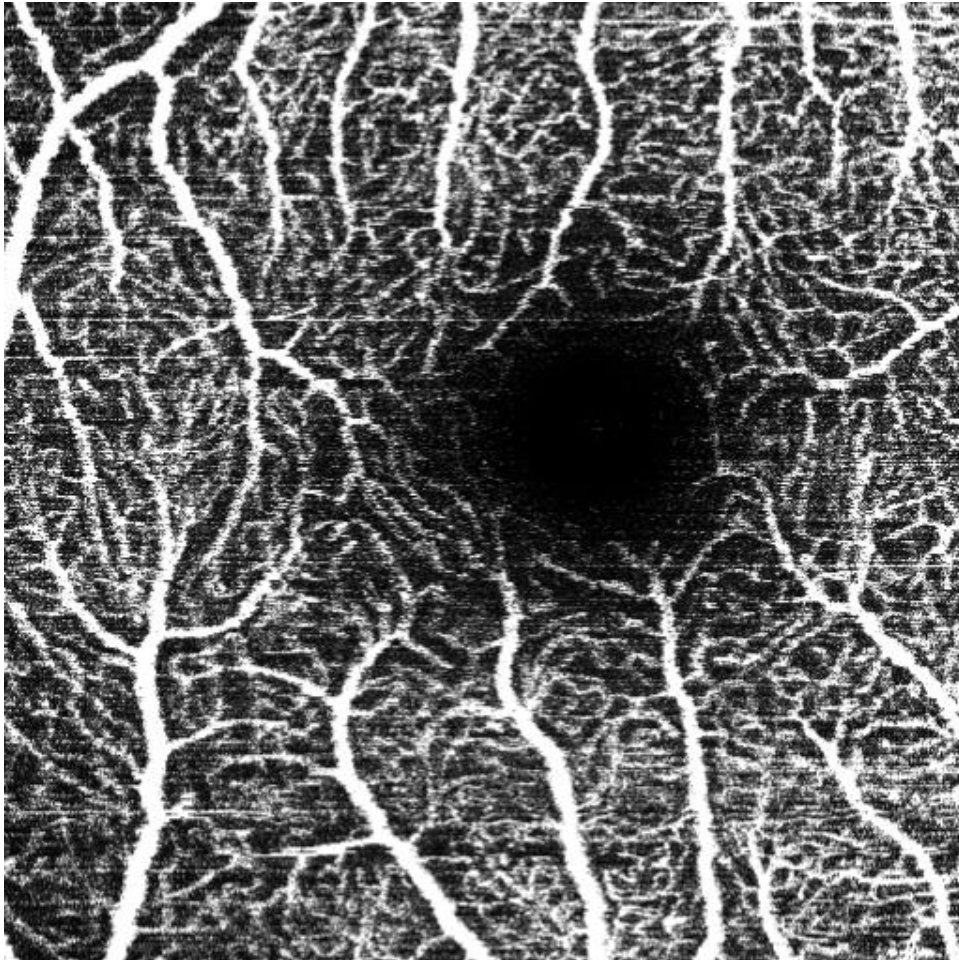
Example 11

Q value 37

Example 11: QC failed

Stretching

Quilting

Quilting

Decentration

Banding/ quilting
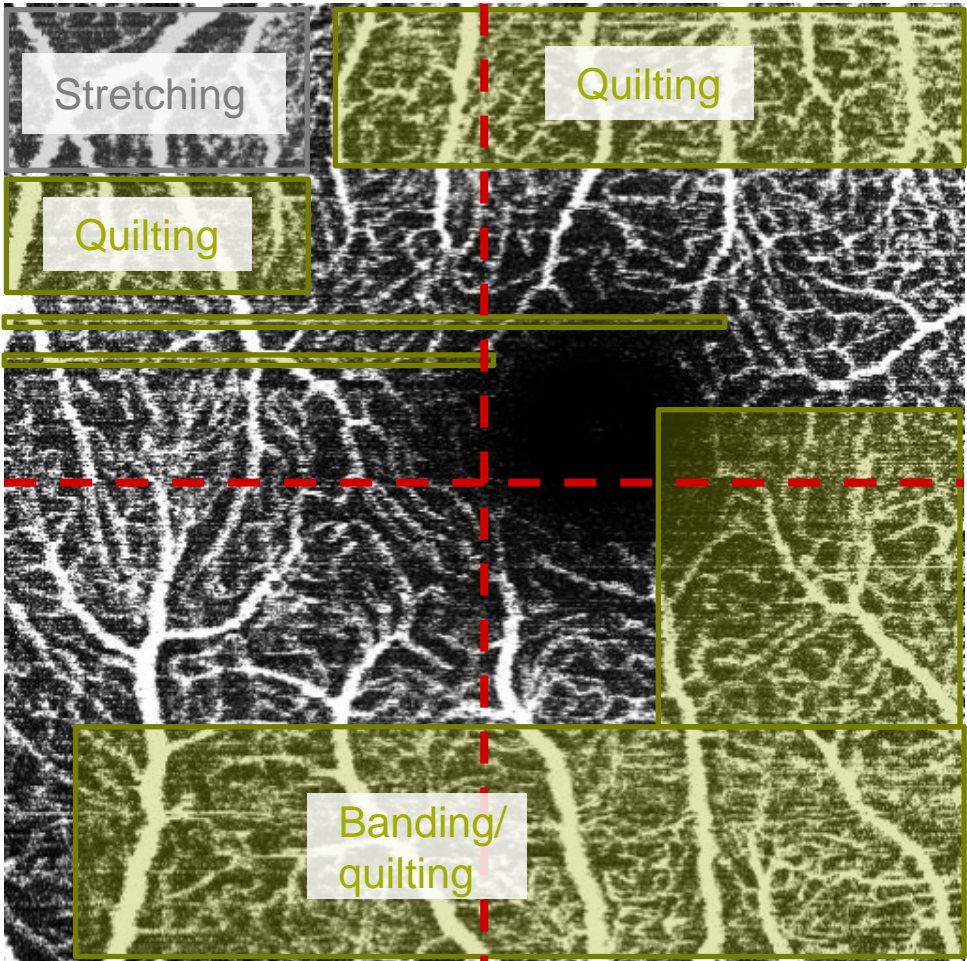
O:		✓
S:		✓
C:		decentration
A:		✓
R:		✓
M:		>25%
P:		✓

Q value 37

Example 12
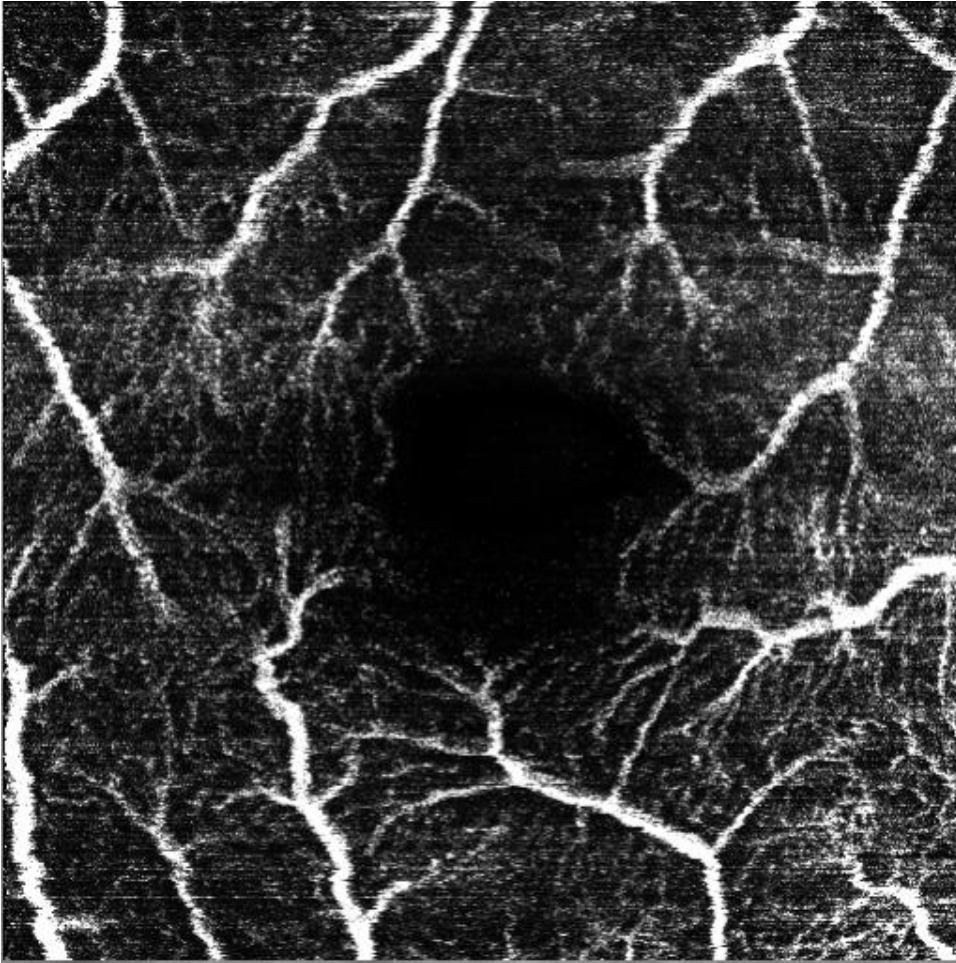
Q value 29

Example 12: QC failed

Complete defocus

Banding

Vessel Stretching

Quilting
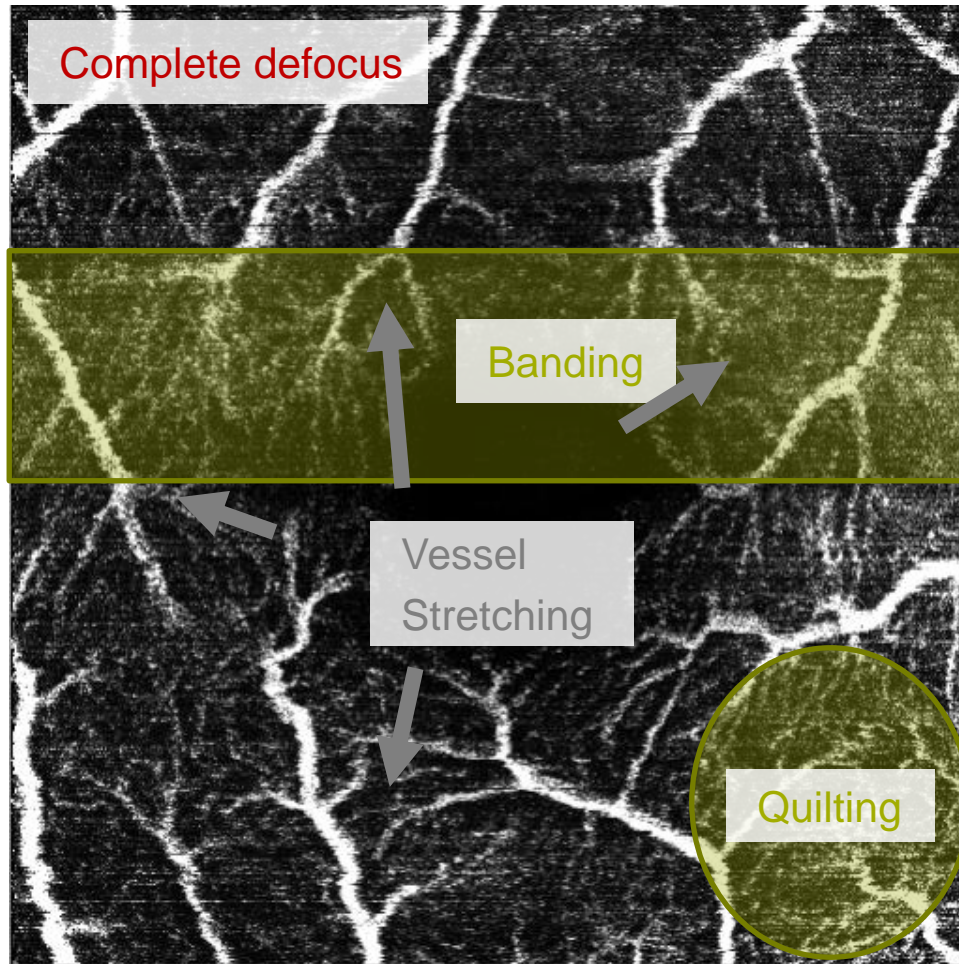
Q value 29

O:	Defocus
S:	Q<30
C:	✓
A:	✓
R:	✓
M:	>25%*
P:	✓

* If severe defocus occurs: It is very difficult to differentiate between pure motion artifacts and defocus. However, significant motion artifacts are very probable in defocused OCTA images
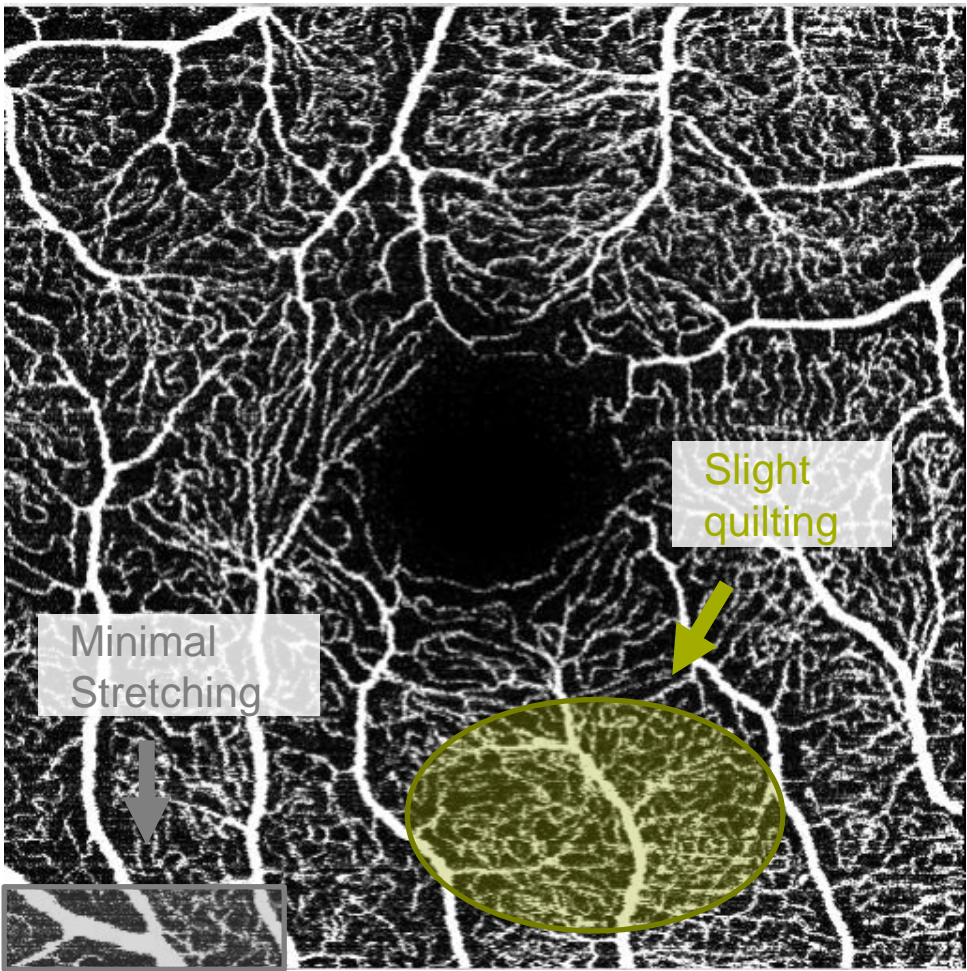
Example 13
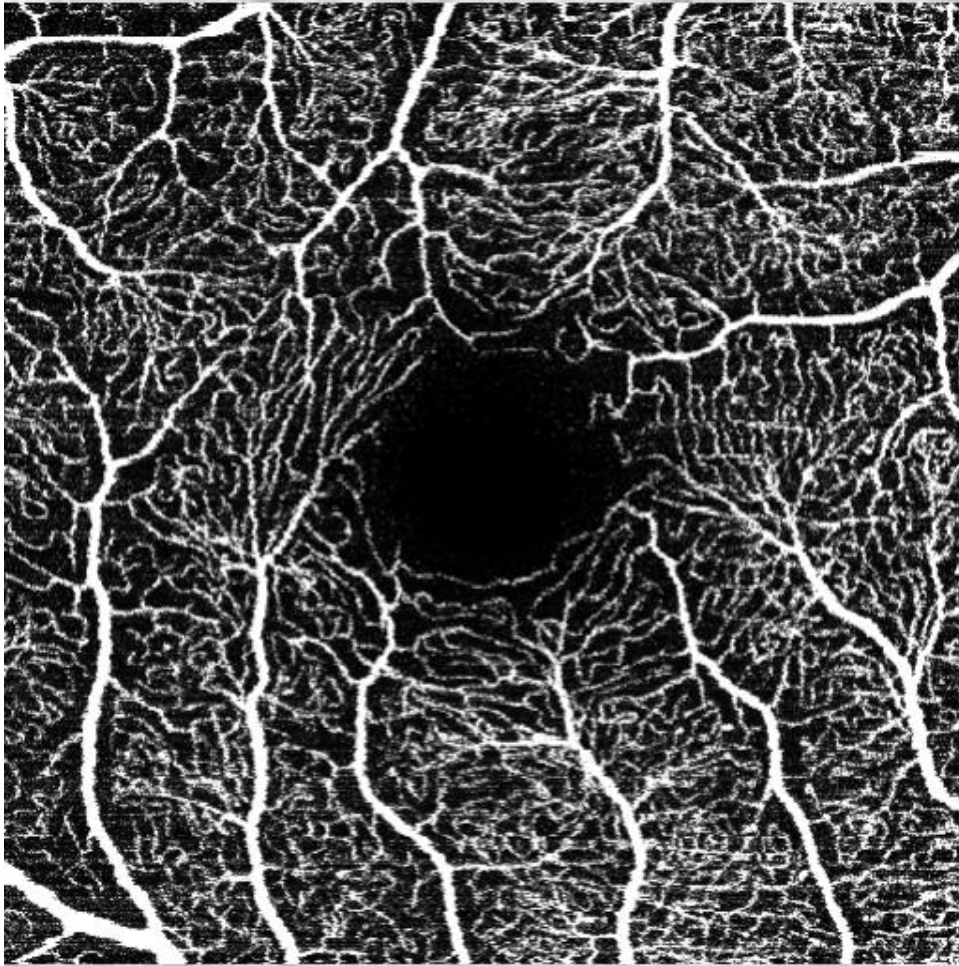
Q value 39

Example 13: QC passed
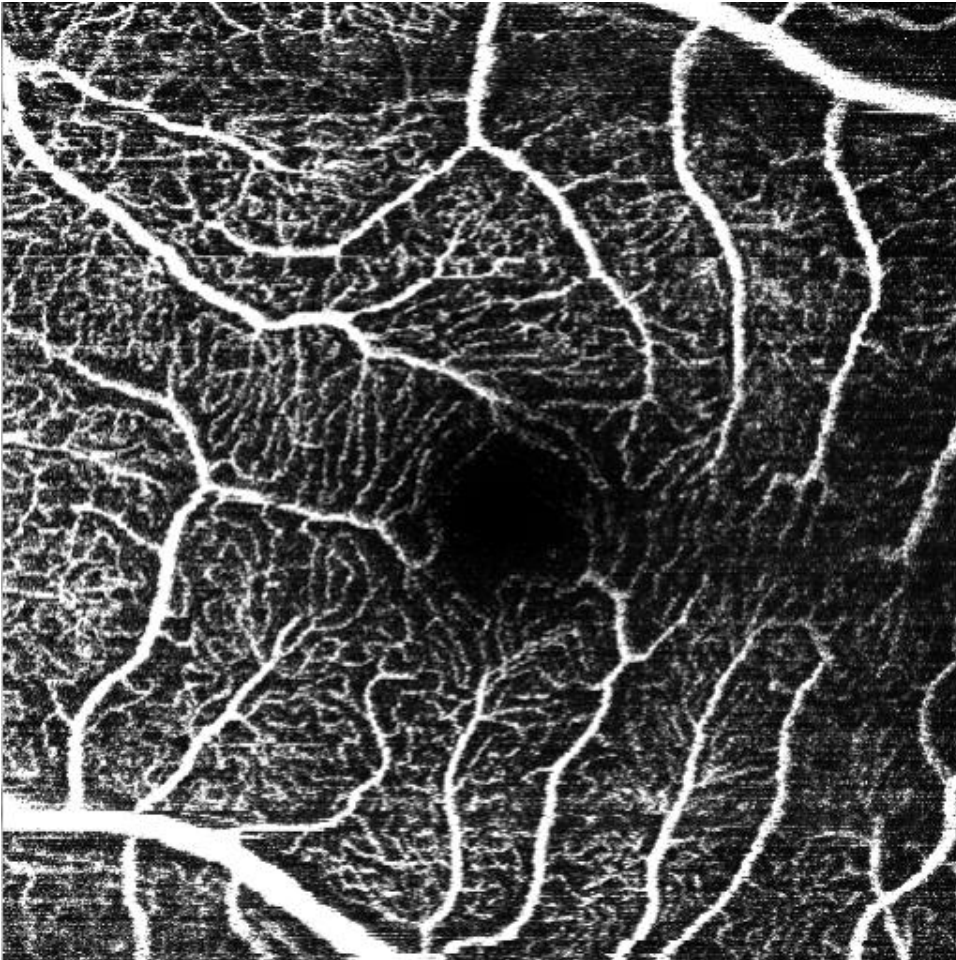

Slight quilting

Minimal Stretching

Q value 39

O:	✓
S:	✓
C:	✓
A:	✓
R:	✓
M:	≤25%
P:	✓

Example 14

Q value 40

Example 14: QC failed

Banding

Stretching
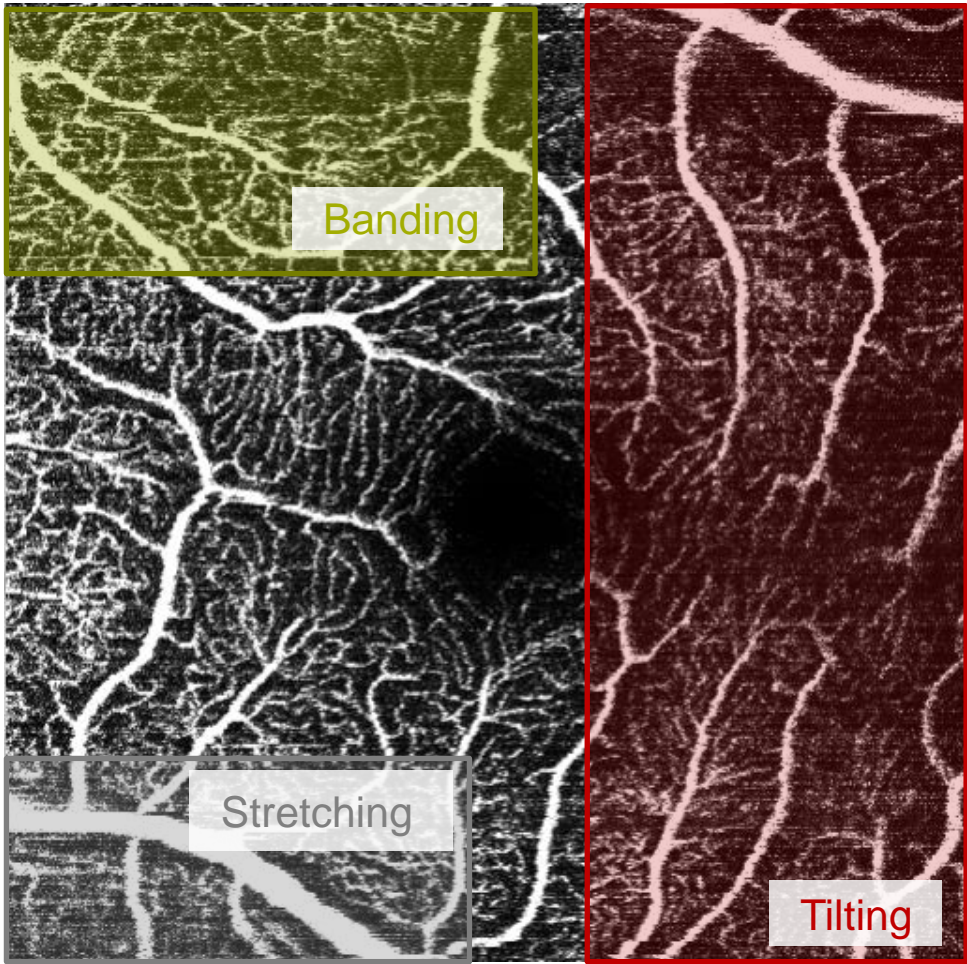
Tilting

Q value 40

O:	Tilting
S:	✓
C:	✓
A:	✓
R:	✓
M:	>25 %
P:	✓

Example 15
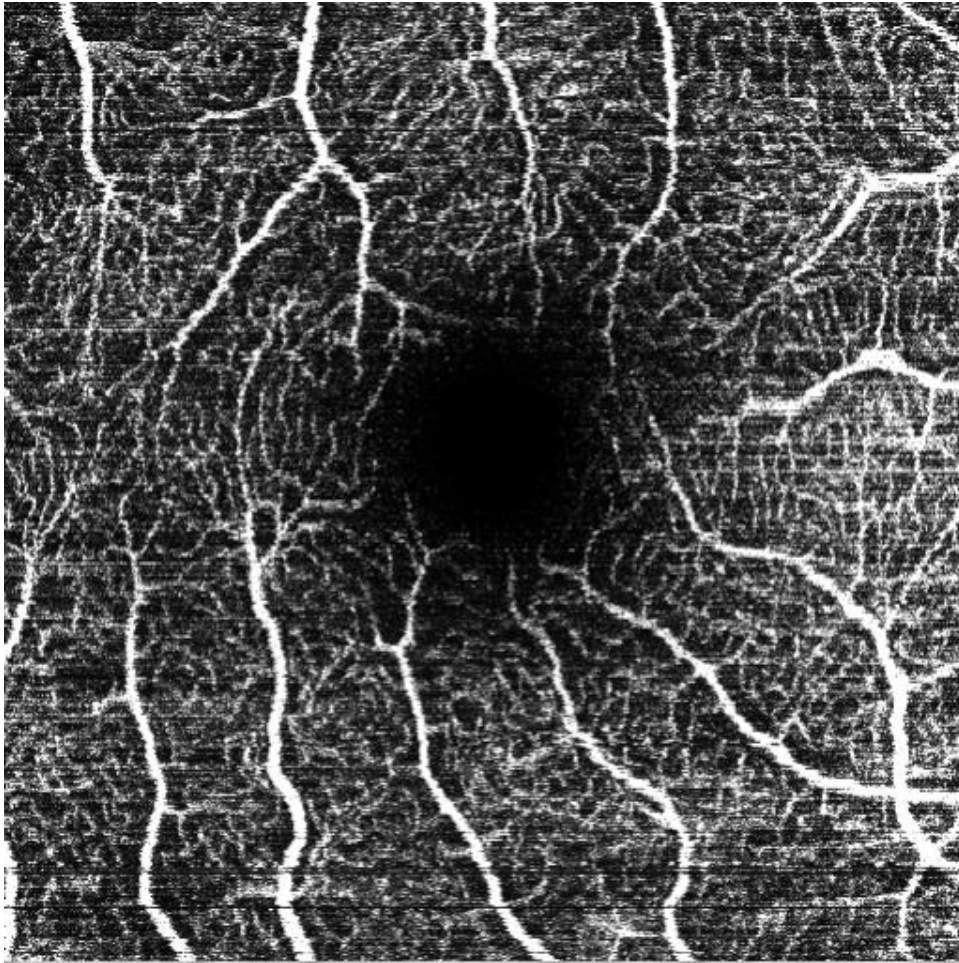
Q value 39

Example 15: QC failed

Q value 39

O:	✓
S:	✓
C:	✓
A:	✓
R:	✓
M:	>25%
P:	✓