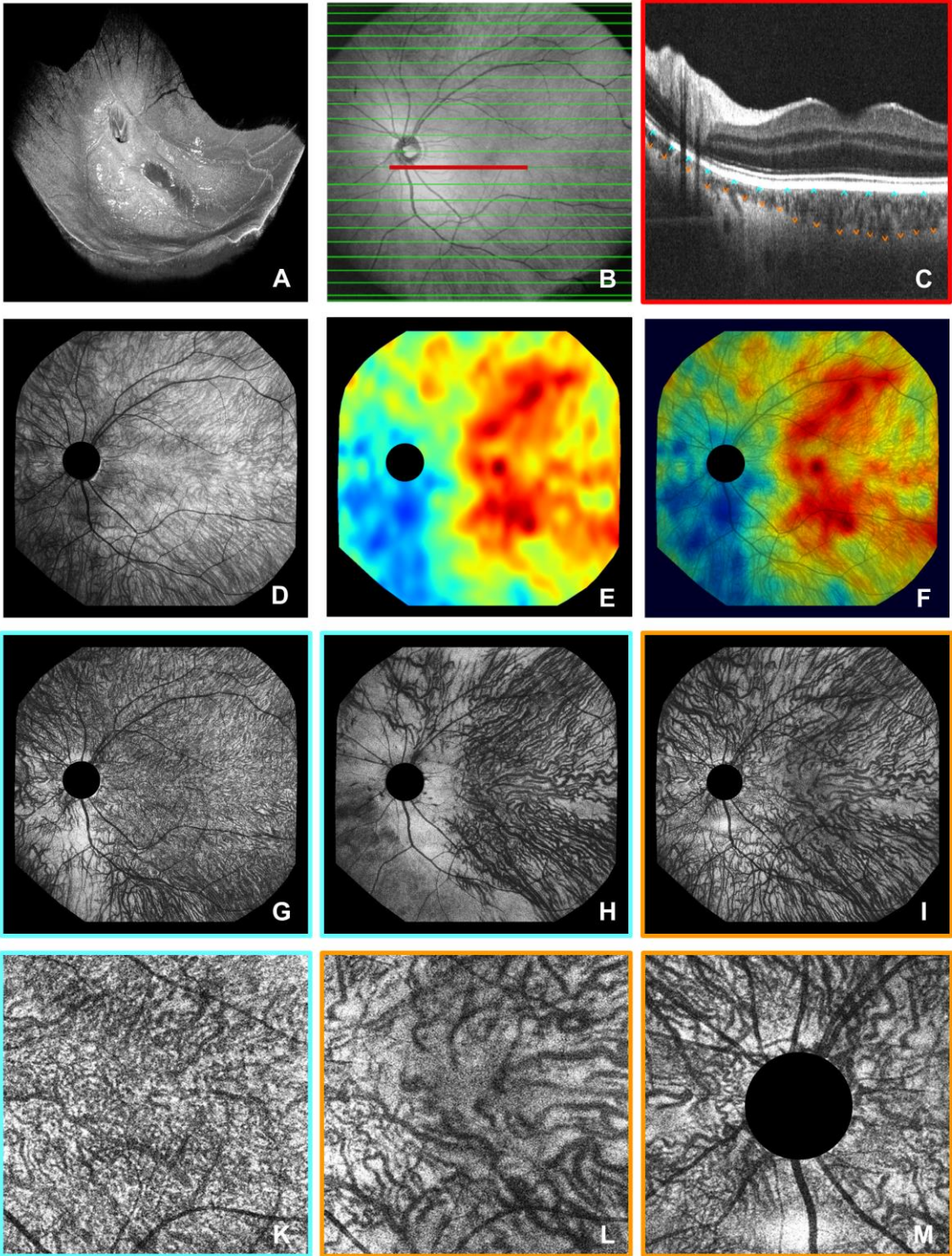
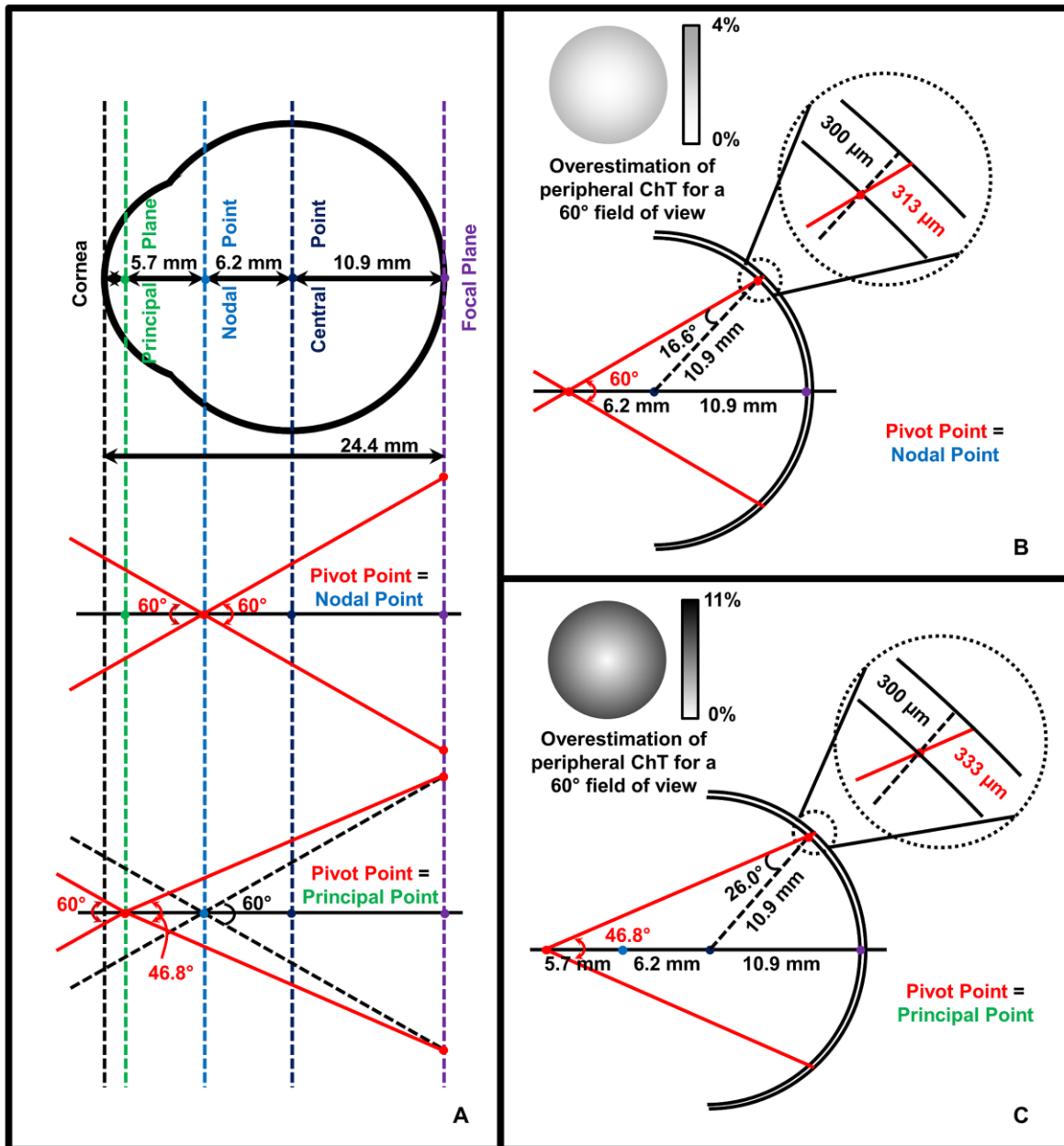


Supplementary Material



S1: ~60° choroidal thickness and vascular pattern visualization using a single densely-sampled wide-field OCT dataset of a 34-year-old male with retinoschisis (spherical equivalent refraction -1.75 D):

(A) 3D visualization, **(B)** OCT fundus image showing the locations of the B-scans selected for manual choroidal thickness (ChT) measurements (green lines), **(C)** Close-up view of one of the selected B-scans for which the positions of the retinal pigment epithelium (RPE) (cyan arrows) and the choroidal-scleral interface (CSI) (orange arrows) were manually determined. Choroidal summation map **(D)** and co-registered choroidal thickness (ChT) map **(E)** resulting from the manual thickness measurements. **(F)** Choroidal summation map overlaid onto the ChT map to enhance the interpretation of the observed ChT pattern, **(G,H)** Depth-resolved en face images (thickness $\approx 25 \mu\text{m}$) referenced to the manually determined RPE and extracted 25 μm and 75 μm below the RPE to visualize different choroidal vascular structures. **(I)** En face image (thickness $\approx 25 \mu\text{m}$) referenced to the CSI and extracted 10 μm above the reference layer, **(K)** Close-up view of the $\sim 20^\circ$ macular region of image G, **(L)** Close-up view of the $\sim 20^\circ$ macular region of image I, **(M)** Close-up view of a $\sim 20^\circ$ region centered at the optic nerve head and extracted from image I, (choroidal thickness was measured in μm)



S2: Overestimation of peripheral choroidal thickness due to a non-perpendicular incident angle of the incoming OCT beam for a 60° field of view

(A) For a schematic eye (distances based on reference⁴⁴) the path of the OCT beam at a maximum scanning angle of 60° is illustrated. The location of the pivot point determines how much the incident angle onto the retinal and choroidal layers in the periphery differs from the ideal perpendicular direction. While the size of the imaging

field of view remains approximately the same, the curvature of the retinal and choroidal layers in the OCT scans is smaller in the case for which the nodal point is chosen as the pivot point due to the smaller change of the incident angle throughout the posterior pole. **(B)** In the case for which the pivot point is placed at the nodal point the overestimation of peripheral choroidal thickness accounts to around 4% for an average choroidal thickness of 300 μm and a 60° imaging field of view. **(C)** In the case for which the pivot point is placed in the principal plane the overestimation of peripheral choroidal thickness accounts to around 11% for an average choroidal thickness of 300 μm and a 60° imaging field of view.