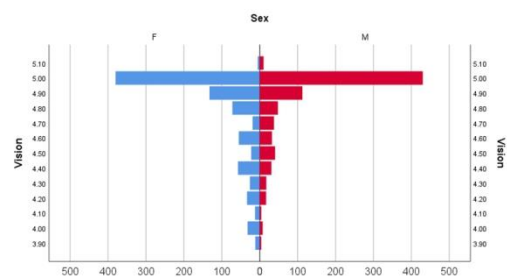
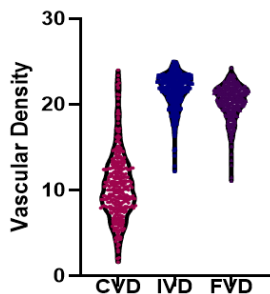


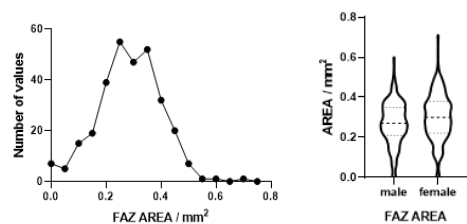
Supplement



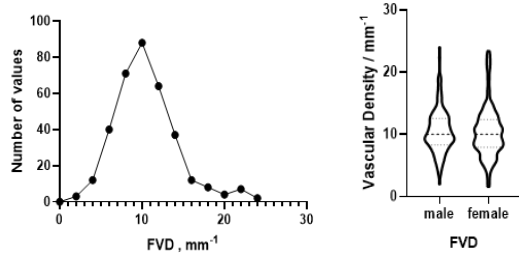
Supplement 1a. Vision based on different genders.



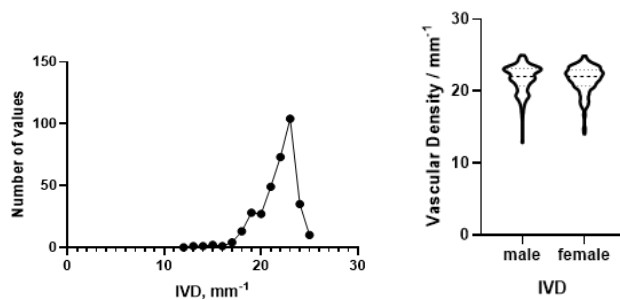
Supplement 1b. The violin map shows the macular central vascular plexus density (CVD), inner vascular plexus density (IVD), full vascular plexus density (FVD) of OCTA measurements.



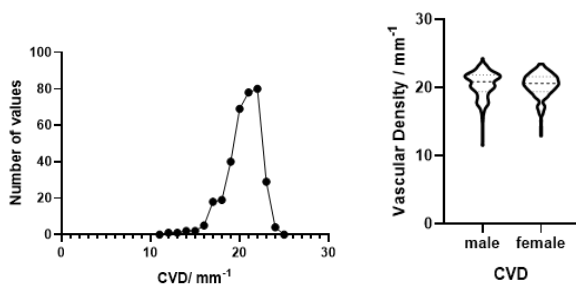
Supplement 1c. These graphs show the distribution of FAZ area and compare by gender. There were no differences among sex groups in FAZ area. (p=0.011)



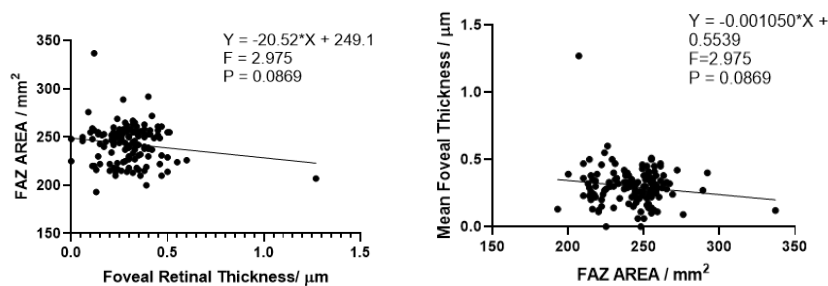
Supplement 1d. These graphs show the distribution of FVD area and compare by gender. There were no differences among sex groups in FVD. ($p=0.021$)



Supplement 1e. These graphs show the distribution of IVD area and compare by gender. There were no differences among sex groups in IVD. ($p=0.061$)



Supplement 1f. These graphs show the distribution of CVD area and compare by gender. There were no differences among sex groups in CVD. ($p=0.780$)



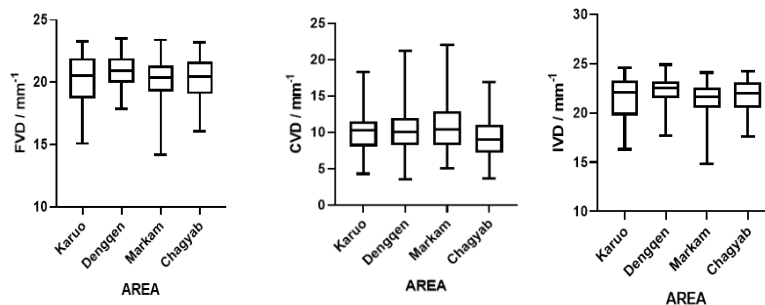
Supplement 2. The correlation between Mean Foveal Thickness (MFT) and FAZ area.

Supplement 3. Some areas in Tibet and their altitude.

NAME	Altitude / meters
Lhasa	3658.00
Xigaze	3836.60
Qamdo	3240.00
Banbar	3600.00
Dengqen	3600.00
Lhorong	3640.00
Riwoqe	3810.00
Baxoi	3850.00
Jomda	3500.00
Gonjo	3686.00
Chagyab	2950.00
Zogang	3700.00
Mangkam	3780.00

Supplement 4. Clinical characteristics of the study samples and optical coherence tomography measurements of retinal and subfoveal choroidal thickness according to different area.

	Karuo (N=83)	Dengqen(N=69)	Markam(N=67)	Chagyab(N=76)	p
Vision	4.64 ± 0.33	4.80 ± 0.26	4.88 ± 0.250	4.84 ± 0.28	<0.001
Mean Foveal Thickness, μm	248.93 ± 13.53	236.35 ± 21.37	239.24 ± 15.46	236.11 ± 20.23	<0.001
FAZ, mm^2	0.30 ± 0.16	0.29 ± 0.11	0.27 ± 0.10	0.29 ± 0.11	0.604
FVD, mm^{-1}	20.40 ± 2.05	20.78 ± 1.79	20.25 ± 1.59	20.72 ± 1.45	0.210
IVD, mm^{-1}	21.77 ± 2.07	22.16 ± 1.73	21.54 ± 1.58	22.06 ± 1.40	0.091
CVD, mm^{-1}	9.65 ± 3.08	10.00 ± 3.44	10.07 ± 2.69	10.17 ± 2.99	0.1211
Myopia Rate, %	77.1	49.4	27.5	41.8	<0.001



Supplement 5. Box plot shows the habitat distribution of the OCTA result in health students in vessel density. There were no differences among different area.