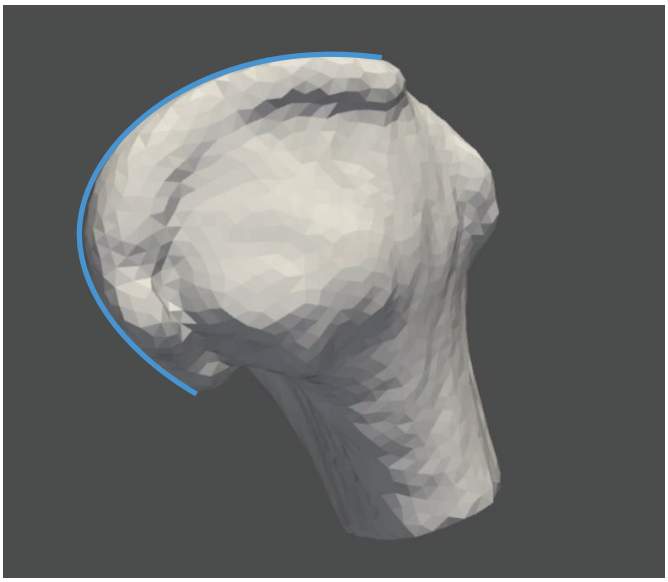
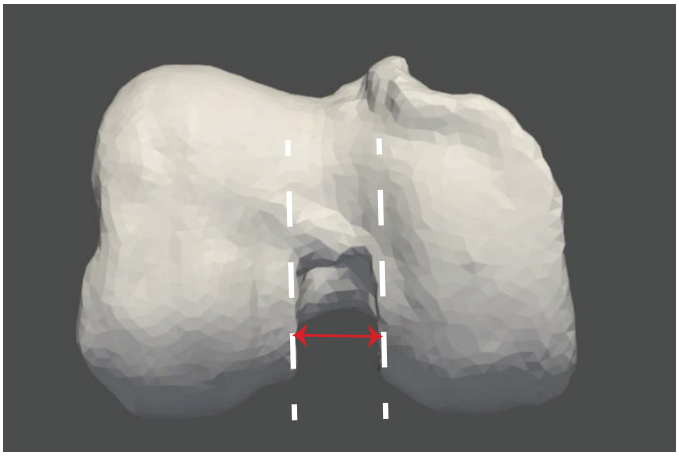
Femur

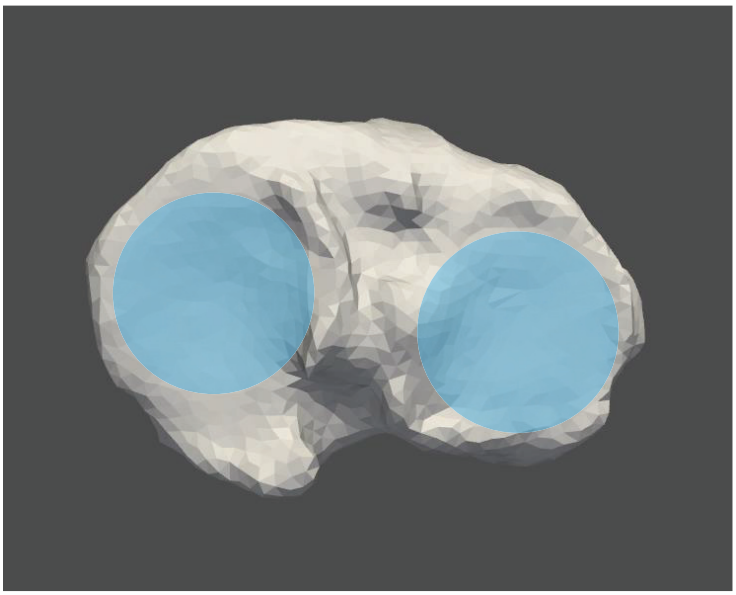


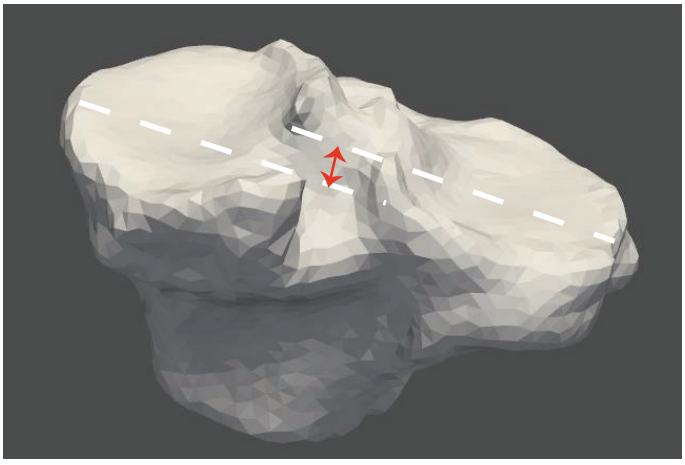


1. The curvature of the upper part. Shown in red

2. Distance is shown in red

Tibia

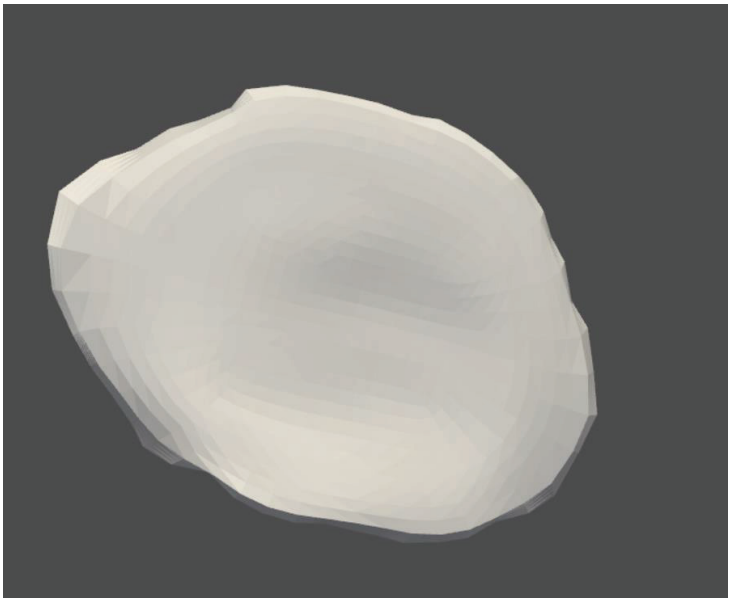




3 - 4. The radius of the circle that can be fitted into the tibia part where cartilage is supposed to be, shown in blue

5. Level difference between the lateral and medial part where cartilage is supposed to be, shown in red

Tibia medial and lateral cartilages



6 - 7. Measure the curvature of medial and lateral cartilages.
We can extract the surface and then measure curvature using
PolyData.curvature(curv_type='mean', progress_bar=False)
https://docs.pyvista.org/api/core/_autosummary/pyvista.PolyData.curvature.html

8-9. Label cartilage "Healthy" or "Damaged."
Check if there are any holes inside the cartilage mesh.
The example is highlighted in red.