Subject: meaning of Xvec argument in EXTRACT_SLICE
Posted by James[2] on Tue, 26 Oct 2010 20:51:03 GMT
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Hi all,

I have a volume image of blood vessels. I've already calculated the centerlines of the vessels and stored them in 3*n arrays. I want to take planar slices perpendicular to a centerline path to get cross-sections of a vessel.

EXTRACT_SLICE does exactly what I want. I specify the center using a point on the curve, say points[*,i]. I can get the normal vector with points[*,i+1] - points[*,i]. But I don't understand what the Xvec argument means.

The description is: "The three values are interpreted as the 0 dimension directional vector. This should be a unit vector." I think this means that points of the form Origin + k*xvec in the 3D array (where origin=points[*,i] and k is any real number) will form a horizontal line in the output plane. If that's correct, though, what happens if I choose an Xvec that isn't orthogonal to the normal vector? I'm confused...