Hi David,
I wouldn't say 3D nearest neighbour generally doesn't make sense - it's
useful when you resize masks that should be used to derive some
measurement or other from a different volume. Typical example: Mask
drawn on volume MRI, which is then transported to some other modality,
e.g. fMRI or PET. Many imaging packages won't take fractional values for
such masks, so nearest neighbour is the way to go.
Cheers,
Jo