The following paragraphs describe the methods that were used on the different version(s) of the ICBM 452 Tl Atlas.

ICBM 452 T1 Atlas

Affine AIR 12 Atlas

The atlas was created using AIR5.0 and exists in two formats (Analyze/IMG/HDR & MINC). The atlas is based on linear transforms of the subjects into the atlas space using a 12-parameter affine transformation (the air12 atlas). This atlas uses chirp-z interpolation for reslicing the voxel intensities.

Warp 5 Atlas

The second atlas is based on a 5th order polynomial transformation into the atlas space (the warp5 atlas). This atlas uses a 3D-sinc interpolation with half-windows of 6 voxels in each dimension. It has a more accurate alignment then the linear atlas and shows more detail.

Additional information about this atlas is available at the following resources:

http://dx.doi.org/10.1006/nimg.1995.1012

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1088516/

http://www.ncbi.nlm.nih.gov/pubmed/11522763

http://www.ncbi.nlm.nih.gov/pubmed/17266101