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Object independent MRL analysis GUI

① Read DICOM into niftyView datasets n.dcm -> 1.nii.gz
with/without contours.

② Re-orient MRL images

③ If required, mask image
contours, threshold, geometry - mask options.

④ Rigid registration to reference image (CT, MR).
↳ Assess registration

⑤ Any cropping to ensure no gray patches resulting from rigid result with different input image sizes.

⑥ Run deformable registration (nifty reg based).
↳ have option to change the final control point grid spacing depending on application

⑦ Mask deformation field as may be required for analysis: - patient contour
- subsection of phantom volume
- ...

⑧ Import deformation field data into matlab to:
- Convert x,y,z voxels into dist from iso
- Calculate total ~~dist~~ distortion in 3D.
- Calculate max, mean, min & std dev.