CM Rep Regression

0. Run VTKtoMHD.py in CMRepScript
    - Change .vtk to MHD
    - Run c3d to change mhd to nii.gz

2. Initialize CM-Rep
    1. Run cmrep_fit by running cmrep.sh
    2. Change cmrep parameter file .cmrep
        a. Grid.Model.Coefficient.FileName = [TEMPLATE_VTK_FILE_PATH]
    3. Change cmrep estimation parameter file cmrparam.txt
        a. DefaultParameters.LocalDistancePenaltyTerm.ReferenceModel.Element[0]=[CMREP_PARAM_FILE_PATH]
    4. Put target segmentation label .nii.gz in the same folder
    5. Update cmrep.sh with given paths
        a. cmrep_fit [cmrparam.txt] [def1.cmrep] [target.nii.gz] [outputfolder]

2. Move CM-Rep results file to a Regression folder
    /media/shong/IntHard1/4DAnalysis/Code/SPTSkeleton/DeformetricaTest/CMRep_Regression_Test/TestData

3. Check Orientation of Observation shapes and CM-Rep boundary
    - If necessary, vtkChangeOrientation.py

3. Assign Radius values to boundary and CM-Rep
    1. RadiusFunctionCopy.py
        a. Change vtkPath to CM-Rep vtks in regression folder
    2. RadiusFunctionToBndr.py
        a. BndPath : target shape path
        b. vtkPath : CMRep path
4. Check regression params
    - Cmrep_pair_00.dat
    - Ages in paramdiffeos.xml
    - Ages in reg_call.sh

5. Run regression
    - Reg_call.sh
6. assignRadiusToRegression.py
7. reconBoundaryReg_script.py

8. Update Radius Fields
    - cmrep_fit (check cmrep.sh in the folder)
9. Repeat from 5.