Registration

Bruno 7/25/2008

Goal

- Register and merge the MR Data sets

- Register and merge the CT and MR merged

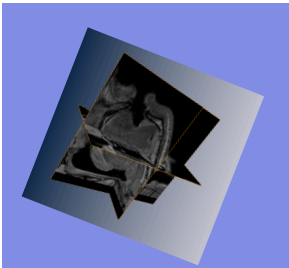# Approaches

- AffineRegistration Amira

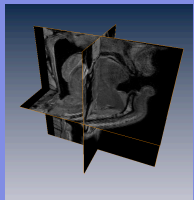- Lanczos and Standart Interpolation (Merge the data sets) Amira

Registration

Apply A,T,S

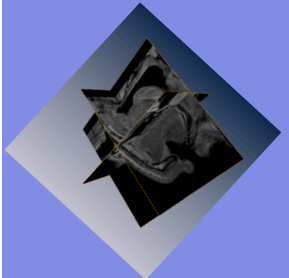**Initial Position**

Final Position

Sagital - High
Axial - Low
Coronal - Low

Sagital - Low
Axial - High
Coronal - Low

Sagital - Low
Axial - Low
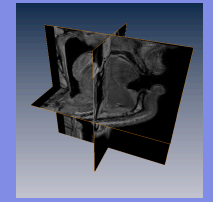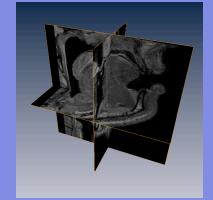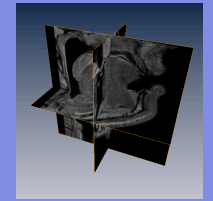Coronal - High

Optimizer

AffineRegistration

AffineRegistration

Reference
PD_Axial

Metric
Normalized Mutual Information

S - Scale
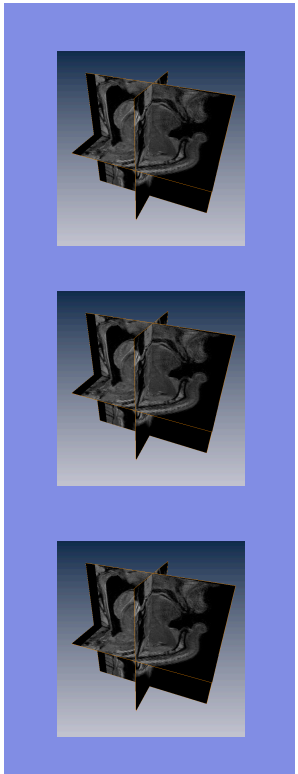A - Rotation
T - Translation

2

Merge

➡️ MR Registration

Aligned MR

3

Resample

Reference PD_Axial

4

Interpolation

5

➡ Cast Merge

Merge

Rigid Transform - Least square - SYD
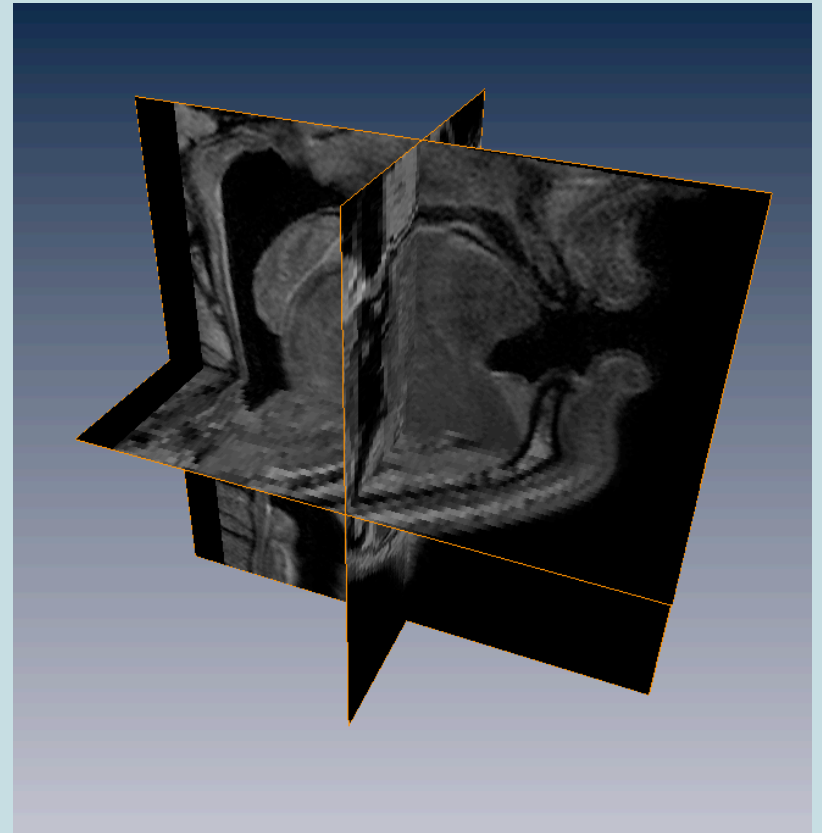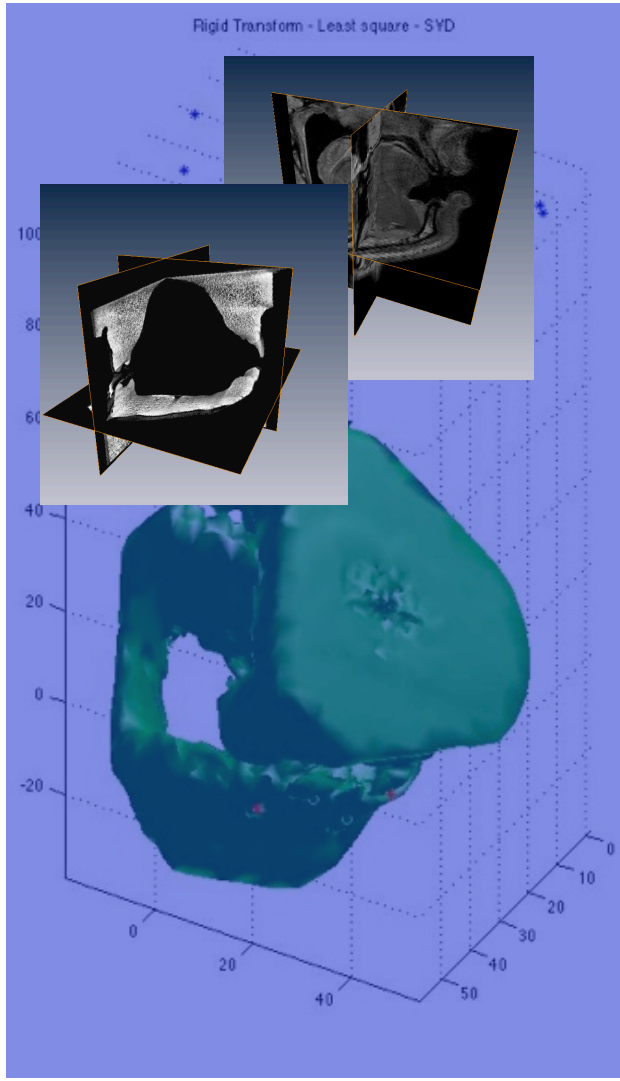
MODEL - MRI
DATA INITIAL - CT
DATA RESULT - CT

Standart Interpolation

Results

Future Work

➡ Merge using ITK

➡ Include semi-automated registration in ArtiSynth

➡ Fully-automated cast registration