z_*OBSOLETE* Calculate Rigid Body Motion in Matlab

***** OBSOLETE, DO NOT USE *****

CRITICAL UPDATE: Use new XMALab software for marker-based XROMM, including Undistortion, Calibration, Marker Tracking, and Rigid Bodies.
XMALab replaces MATLAB XrayProject. See Bitbucket XMALab wiki for XMALab User Manual (not this wiki).

Calculate Rigid Body Motion

1. Type rigidBody into the MATLAB commandline.
2. Select the .csv file with your calculated CT marker coordinates.
3. Select your unfiltered (xyzpts.csv) or filtered (xyzptsButter##.csv) data file.
4. Type the number of bones in the input box.
5. Select the markers associated with each bone (omit any markers with all NaNs, i.e. markers that were not digitized).
6. Save the file output.

Other details:

- rigidBody calls 2 additional scripts: svdrigid and mayaMatrixFormat
- svdrigid takes marker data for a single bone and outputs rotations and translations
- mayaMatrixFormat converts the framex3x3 rotation matrices and framex3 translations and converts them to a framex16 rotation matrix in a Maya-friendly format
- you need a minimum of 3 markers per bone in order for the program to have enough information to calculate the rigid body motion.