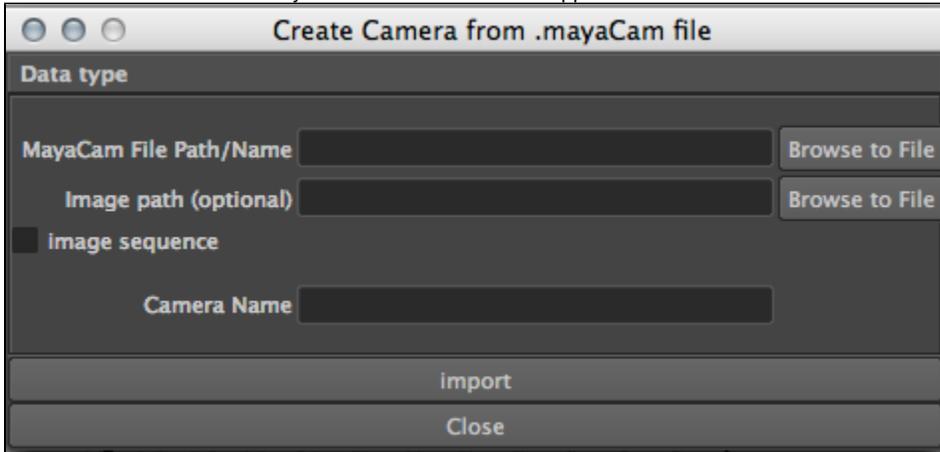# Recreate X-Ray cameras in Maya

UNDER CONSTRUCTION

Import x-ray videos into Maya with correct x-ray camera perspectives

1. Open a new scene in Maya

2. Click **Xcam** in the XROMM maya tool shelf. A window will appear:

3. Browse or type your MayaCam file in the MayaCam File Path box. This file likely have a name similar to [*Cube_Before/After_CamNumber_ImageNumber*]Mayacam.csv. This file will tell Maya how to create a camera that has the same alignment as the Xray camera did in the actual setup.
4. For the optional **Image Path**, Browse to Find the appropriate undistorted image or image sequence. This is what will be shown in frame when looking through the aligned Xray camera.
   1. If you are checking calibration, this file will be the undistorted cube image. Leave **Image sequence** unchecked.
   2. If you are checking digitization or animations, this file will be the first in the sequence of undistorted .tif images of created from the Xray video. As long as all of the .tif files in the sequence are in a separate folder, you only need to select the first one. Check **Image Sequence**, and Maya will find the other files.
5. Name your camera (perhaps Xcam1)
6. Click import. The panel display will change to Xcam1 and Hardware Texturing will be selected automatically (as of Maya XROMM Tools 2.1.6).
7. Repeat for Xcam2

If Xcam camera panel is not automatically selected,

1. Close the XCam window
2. Select Panels -> Perspective -> xrayCam1Shape1
3. On the active camera window pane(s),
   - Select Shading -> Smooth Shade All
   - Select Hardware Texturing

If the images do not display, try this:

1. Click on the image frame (will be called Xcam1_Plane).
   1. This can be done either in the main window, or through Window -> Hypergraph: Heirarchy, and then clicking on Xcam1_Plane.
2. If the Attribute Editor is not open on the left side of your screen, open it by clicking on Window ---> Attribute Editor
3. Select the tab Xcam1lambert; you may have to click on a black arrow next to tabs for popup menu of more tabs
4. Click on the black arrow next to Color
   1. If you are working with a single image, such as a calibration cube image, u**ncheck** the Use Image Sequence box
   2. If you are working with an image sequence such as an Xray video, **uncheck** and **recheck** the Use Image Sequence box
5. Repeat steps 1-11 for second camera
6. make sure that the end time of animation range and the end time of playback range match the number of images in your sequence. If your image sequence does not start at 1, make sure the start and end times of the animation and playback range match the starting and ending numbers of your image sequence.