

# Table of Contents

**X-Ray Reconstruction of Moving Morphology (XROMM)** is an X-ray imaging and computational process that produces precise and accurate 3D movies of skeletal movement.

Visit [www.XROMM.org](http://www.XROMM.org) for general information about XROMM. See [Bitbucket XMALab wiki](#) for XMALab User Manual. See [Bitbucket MayaTools wiki](#) for descriptions of each tool in the MayaTools Scripts.

## ✓ Getting Started

### — Introduction

### — [Tutorial for XMALab with example data](#)

## ✓ Downloads and Installation

### — Download and configure Maya

To download XROMM MayaTools Scripts, see [Bitbucket MayaTools](#) for instructions

## ✓ Distortion Correction

Use **XMALab** software for Undistortion. See [Bitbucket XMALab wiki](#) for instructions.

## ✓ Calibration

Use **XMALab** software for Calibration. See [Bitbucket XMALab wiki](#) for instructions.

## ✓ Marker Tracking (i.e. Digitizing)

Use **XMALab** software for Marker tracking. See [Bitbucket XMALab wiki](#) for instructions.

## ✓ Horos 3D Models

The OsiriX open source project has been taken over by **Horos Project** consortium. Free 64-bit version from <https://www.horosproject.org>.

### — 3D Bone Models

### — 3D Marker Models

### — Cleaning Models with Geomagic

## ✓ Calculate Rigid Body Motion

### — CT coordinate data

## ✓ Animate Bones and Markers

### — Importing mesh models into Maya from Horos

### — Animate Bones

### — Check animation

## ✓ Maya Analysis and Visualization

### — Create Joint Coordinate System (JCS)

### — Measure and export distance between two points

### — Measure the XYZ Coordinates of a Point Over Time

- **Parent a Camera to a reference bone**

- **Calculate Relative Motion**

- ✓ Scientific Rotoscoping

- **Use XMALab for exporting undistorted Trial images**

- **X-Ray Cameras in Maya**

- **Importing mesh models into Maya from Horos**

- **Scientific Rotoscoping**

- **Rotoscoping with one or two markers**

- ✓ Autoscooper (in development)

- **Autoscooper**

- ✓ Tips and Tools



- **Note: Regular Users of the wiki, please add any pages you use regularly**

- **Open Newer Maya Files**

- **Precision testing using frozen cadavers**

- ✓ XMAPortal User Manual

- **Getting Started with the XMAPortal**

- **"Sandbox" for practicing and testing**

- **Data Organization**

- **How to create a New Study**

- **Metadata Pool**

- **How to create trials**

- **How to edit existing trials**

- **How to Upload files**

- **How to hide files**