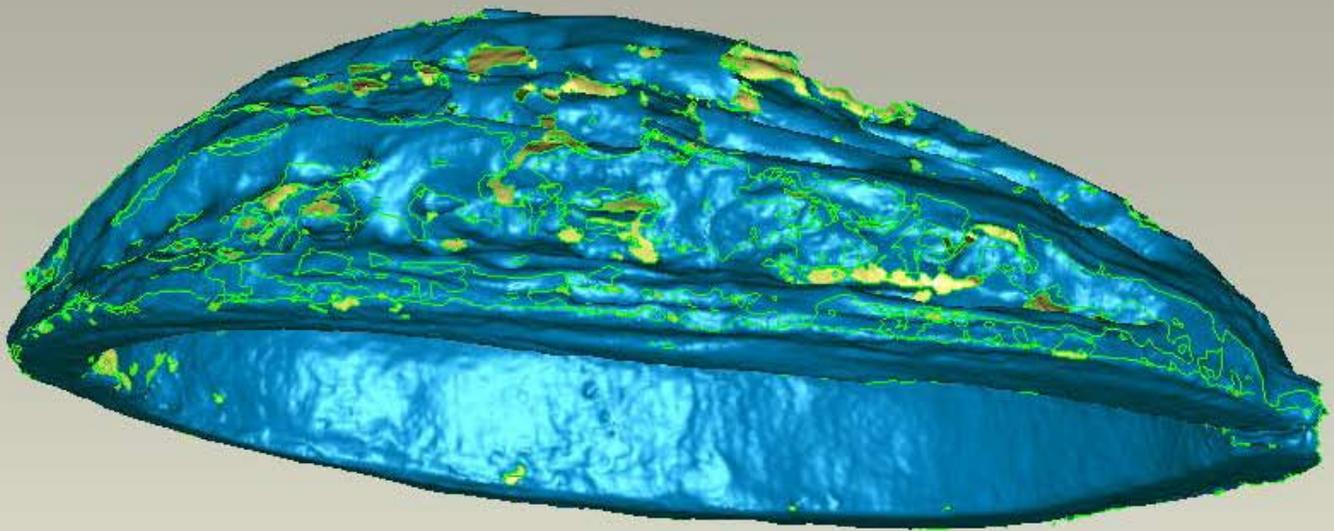


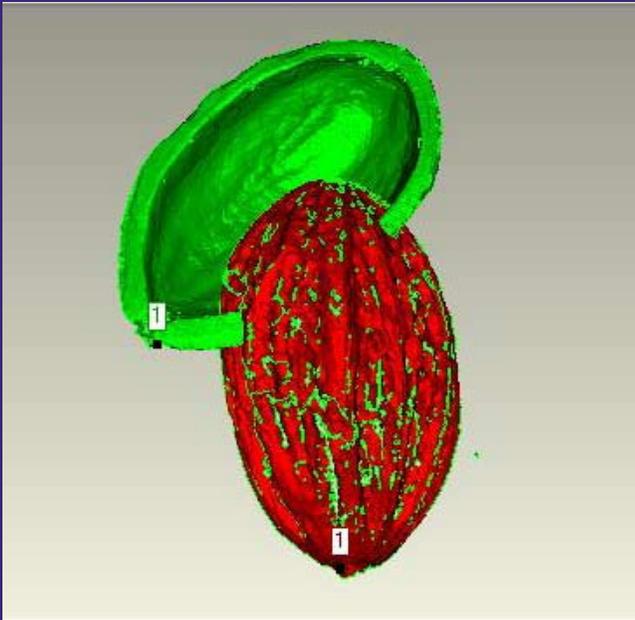
3D Software for Mayan Ethnobotany Cacao (Pataxte species)



Y-Axis

Geomagic

Author: Cindy Contreras



Please Note

This report has not yet been licensed to any other 3d scanner or software manufacturer, distributor, dealer, or sales rep, to distribute.

So if you obtained this from any other company, you may have a pirated copy.

The reason we prefer that FLAAR Reports be obtained only from licensed locations is because a report may be updated by FLAAR. If you got your version from somewhere else, it may be an obsolete edition.

To obtain a legitimate copy, which you know is the complete report with all the original description, please obtain your original and full report straight from:

www.3d-scanners-3d-software-reviews.org

FLAAR Mesoamerica 2010 ©

TABLE OF CONTENTS

Processing half of pataxte	1
Processing complete pataxte	5
Other FLAAR Reports	9

In December 2009 two persons of the FLAAR staff, together with FLAAR director, attended a special three-day 3D scanner training course at Z Corp, where they learned how to handle the portable ZScanner 800 and how to process the data from it. They came back to Guatemala with a ZScanner 800 and a HP laptop with one licensed copy of Geomagic installed; both lent from Z Corp for 90 days.

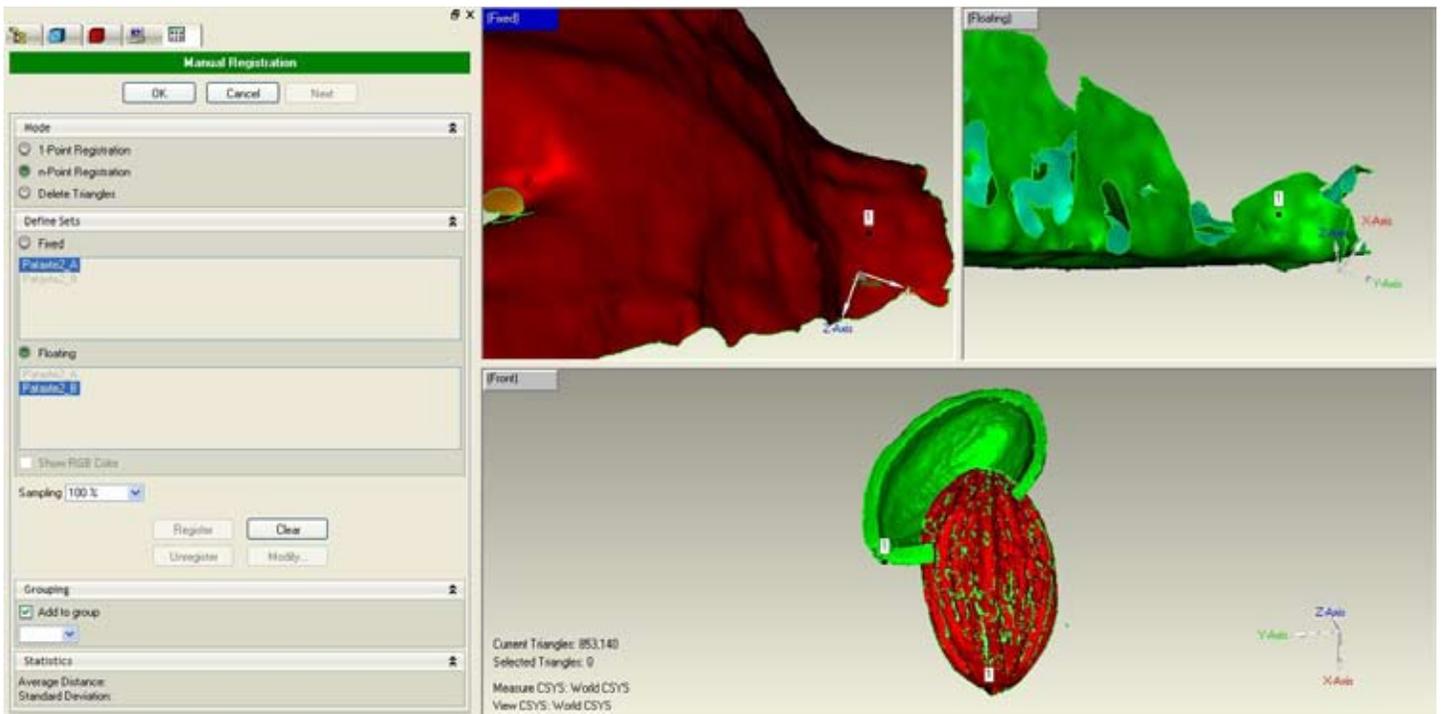
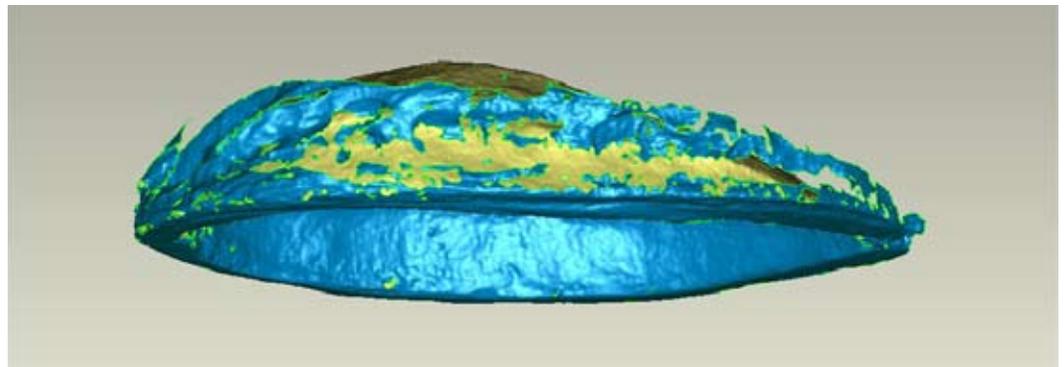
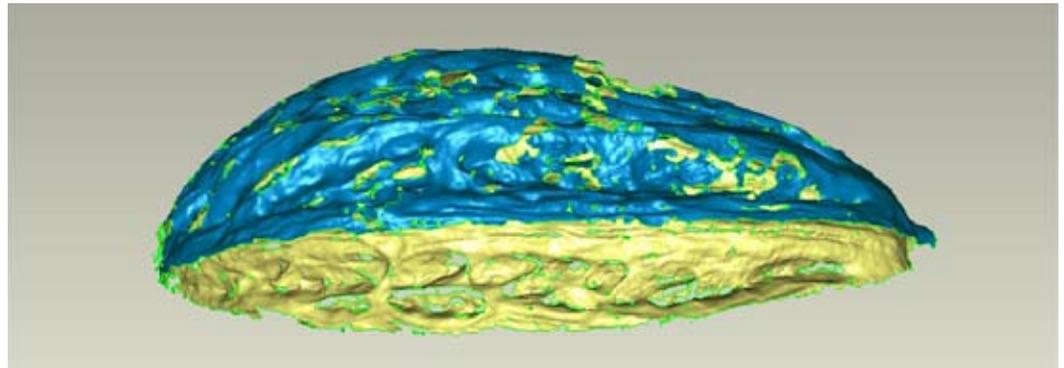
This report shows the processing of two pataxte pods. The pataxte is what is left after removing the cacao which is the fruit from where the chocolate is made.

We are interested in studying the pataxte because the cacao was important in mayan culture and the pataxte pod is found in vessels.

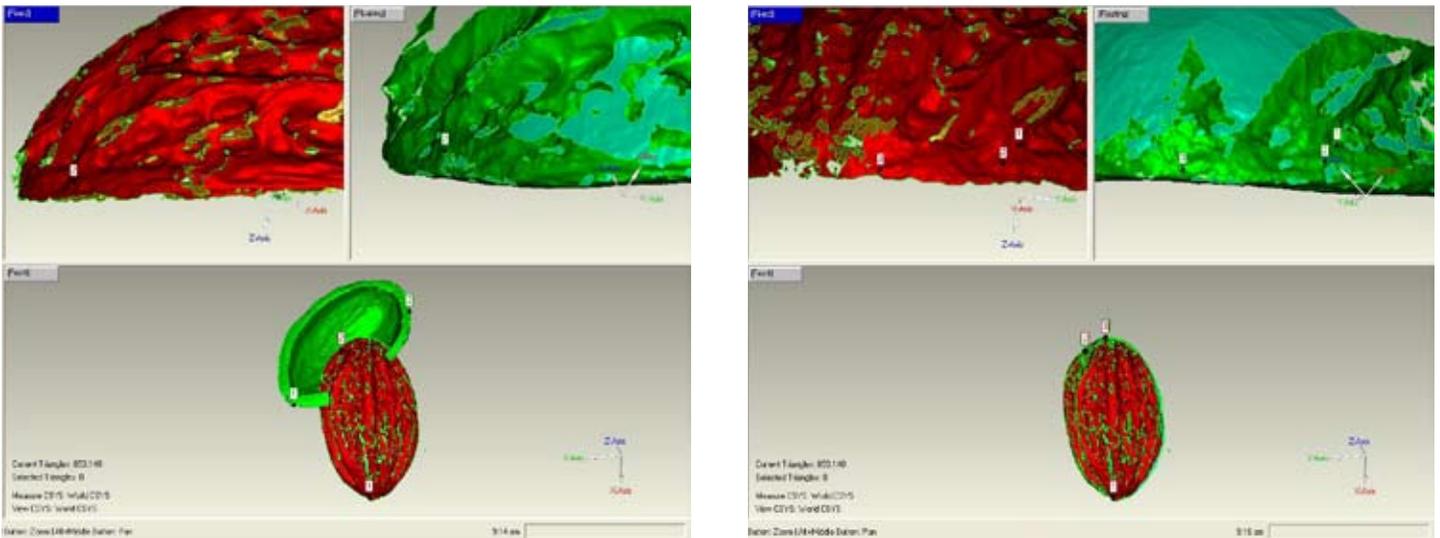
The pataxtes were scanned at the FLAAR studio and they were brought from El Tumbador, San Marcos and Suchitepequez, both located in Guatemala.

The first scan is from half of the pataxte to see how the inside looks like.

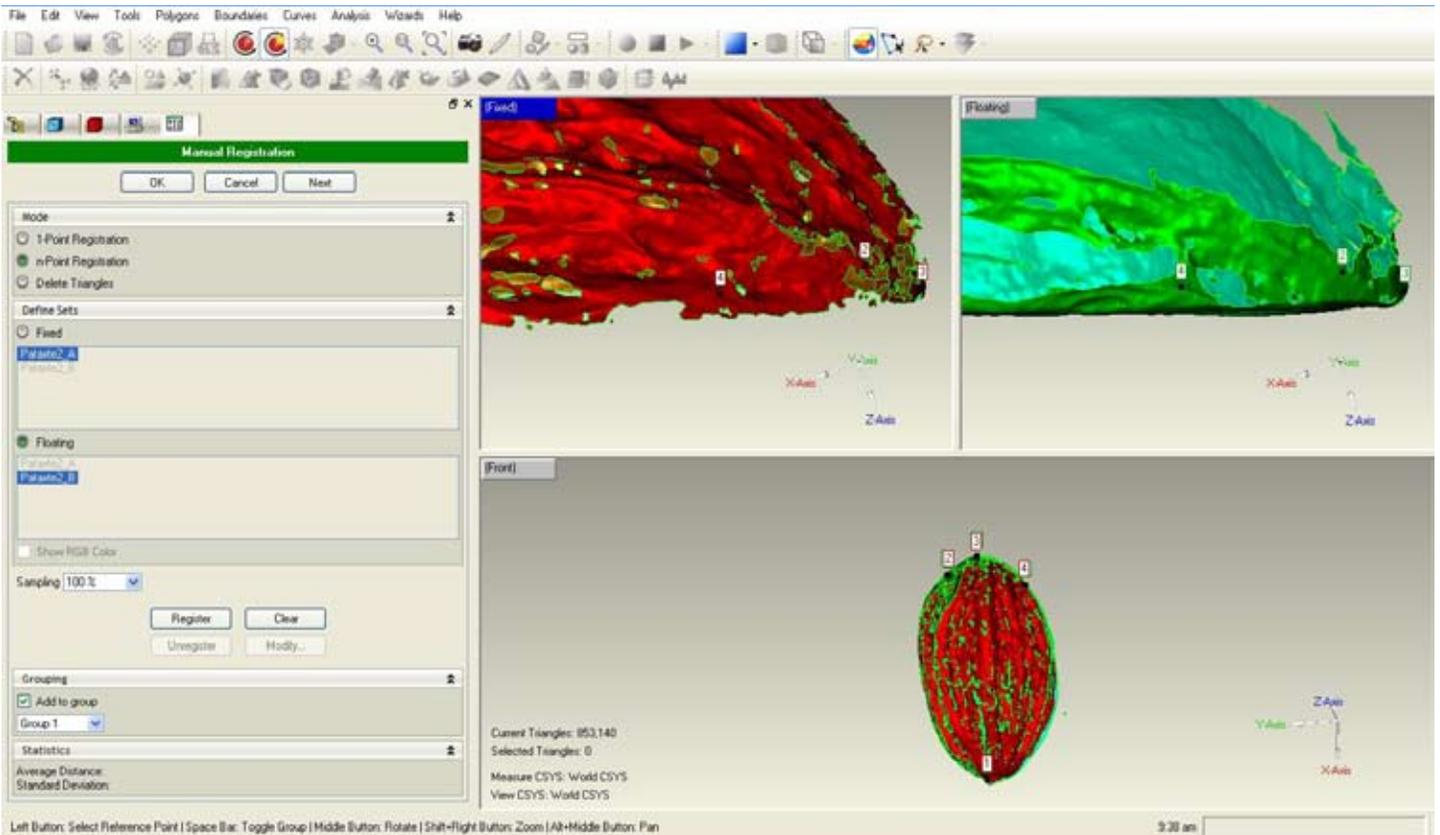
The pataxte was made out of these two scans, the inside and outside of the pataxte.



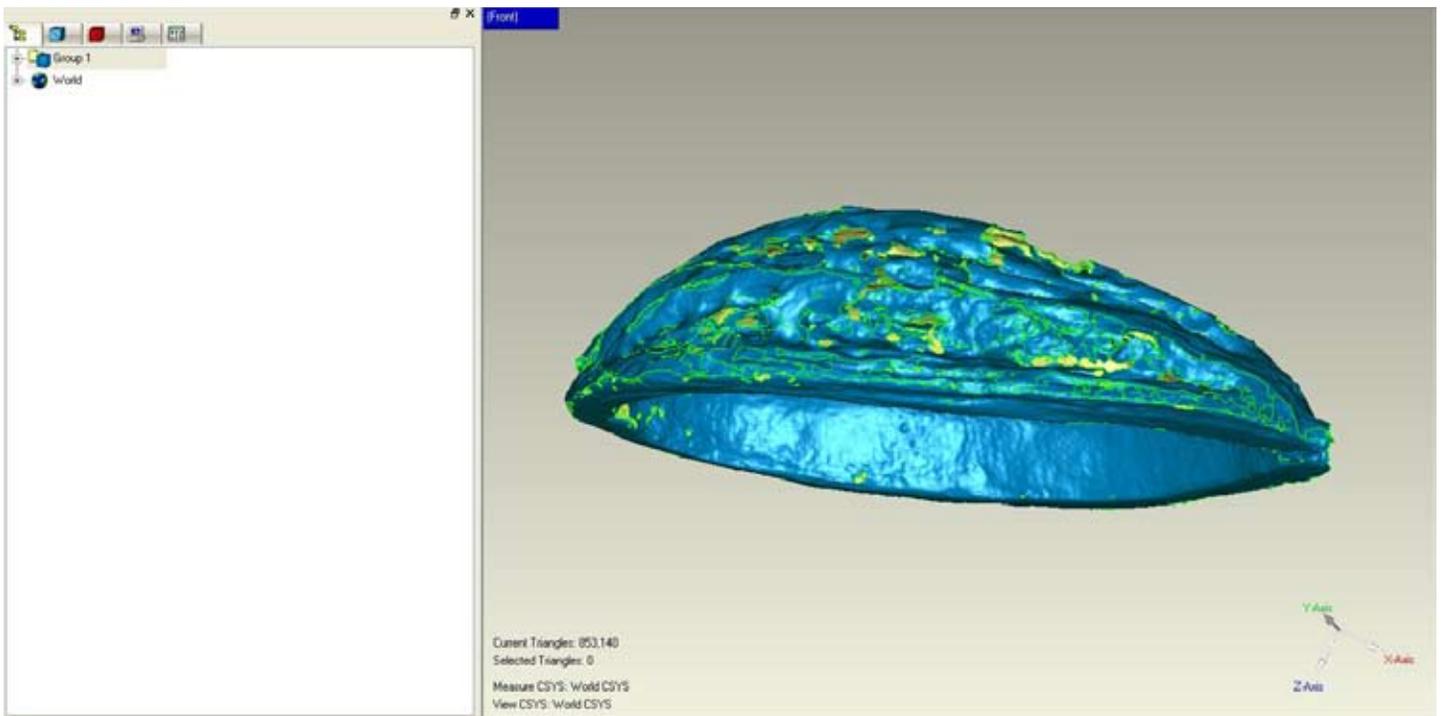
After cleaning up the scans, they are ready to be registered. We selected the two scans from the left panel and then went to Tools > Registration > Manual Registration. Now the viewing area is divided in three. From the left panel we select one scan to be fixed and one to be floating. The bottom frame shows how the scans are being aligned. To make the registration points we move the fixed and floating objects until they are in the same angle and click on the same spots. The registration points are indicated with a number, in this case: 1



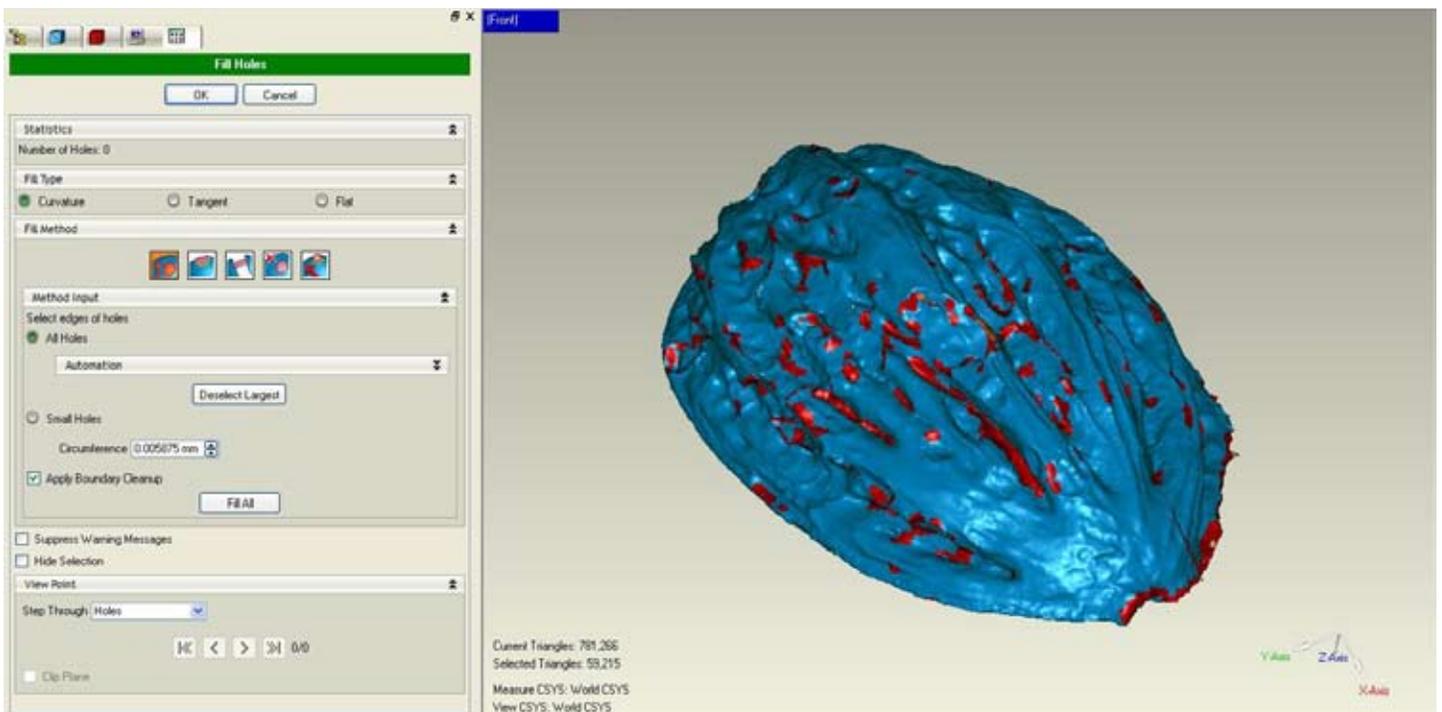
These two images show the second and the third registration point, see how the two scans get aligned at the third registration point.



We used four registration points for this object. This image shows the fourth registration point. When we are finished with the registration points we just click Register and in this case since there is no other scan to register, click OK from the left panel.



The image shows the object after registration. The scans are still separated in the carpet called Group 1, the green lines show the border of each scan. So, we applied Merge. Geomagic keeps the carpet Group 1 and creates an object called Merged 1.



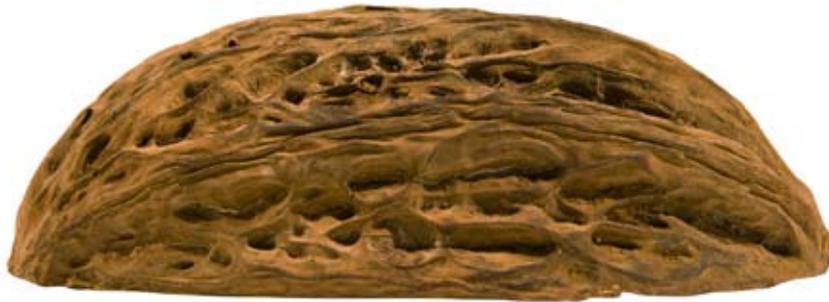
After merging up our pataxte there were several holes in the surface. It is hard for the scanner to capture everything from a surface like this one. So, we applied the Fill Holes tool. The places where there were holes appear in red to see how they will be filled out.

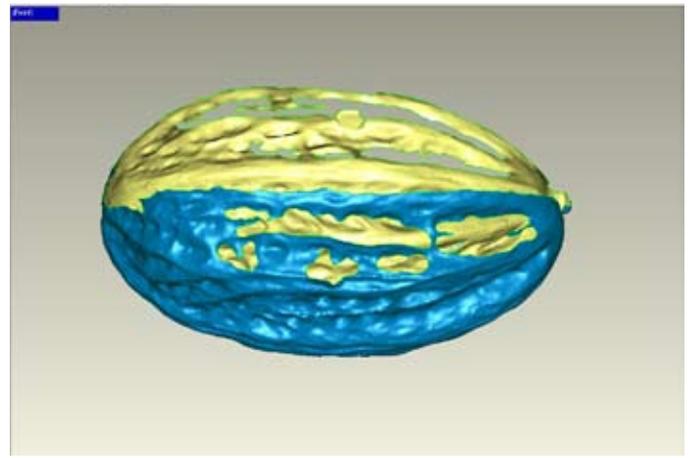
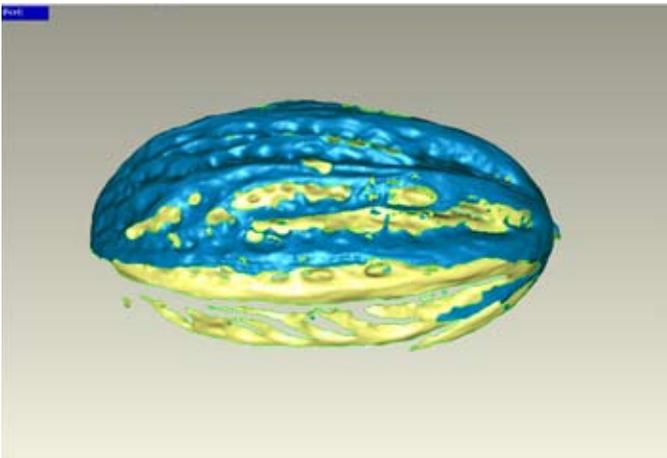


After filling out the holes we applied color to our pataxte to give it a more realistic look.

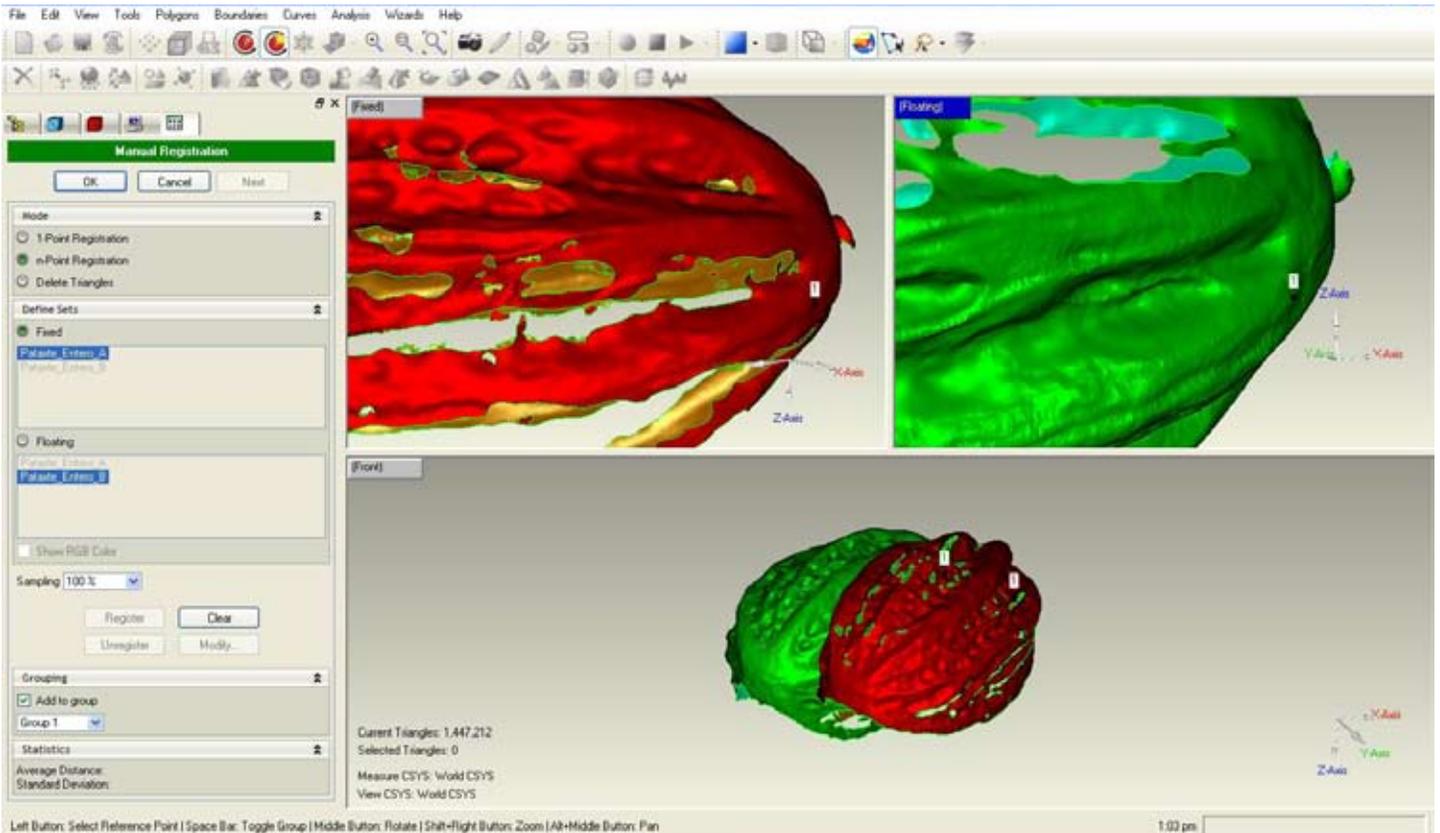
These images show the photos of the pataxte and the images of the scans, so you can make the comparison of the side and the inside.

Even though the surface was not easy for the scanner, we were able to fill out the missing spots easily, but the results will not be very accurate.

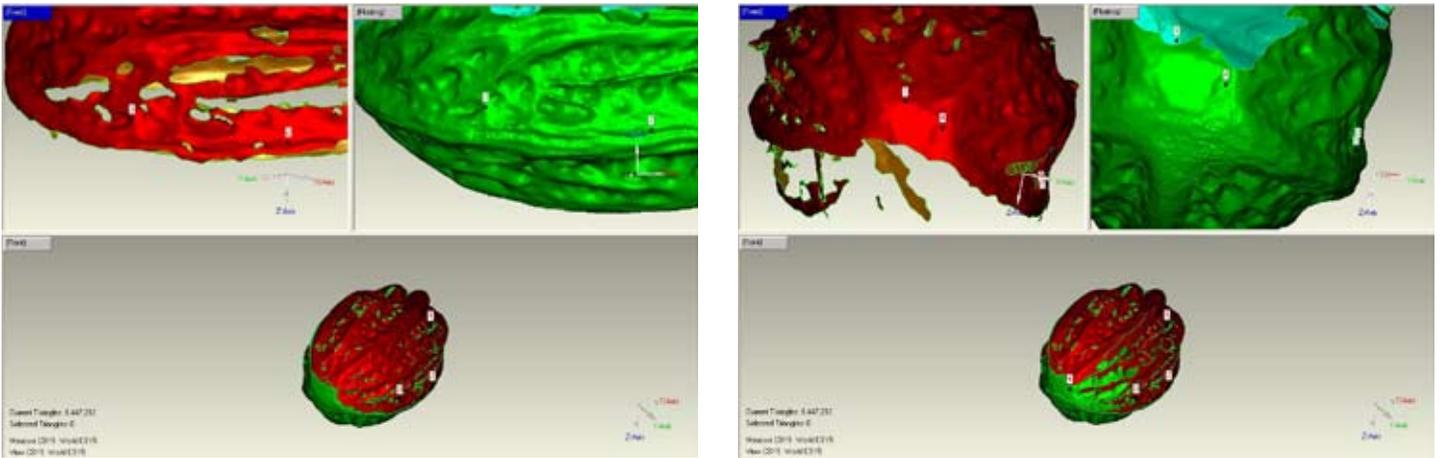




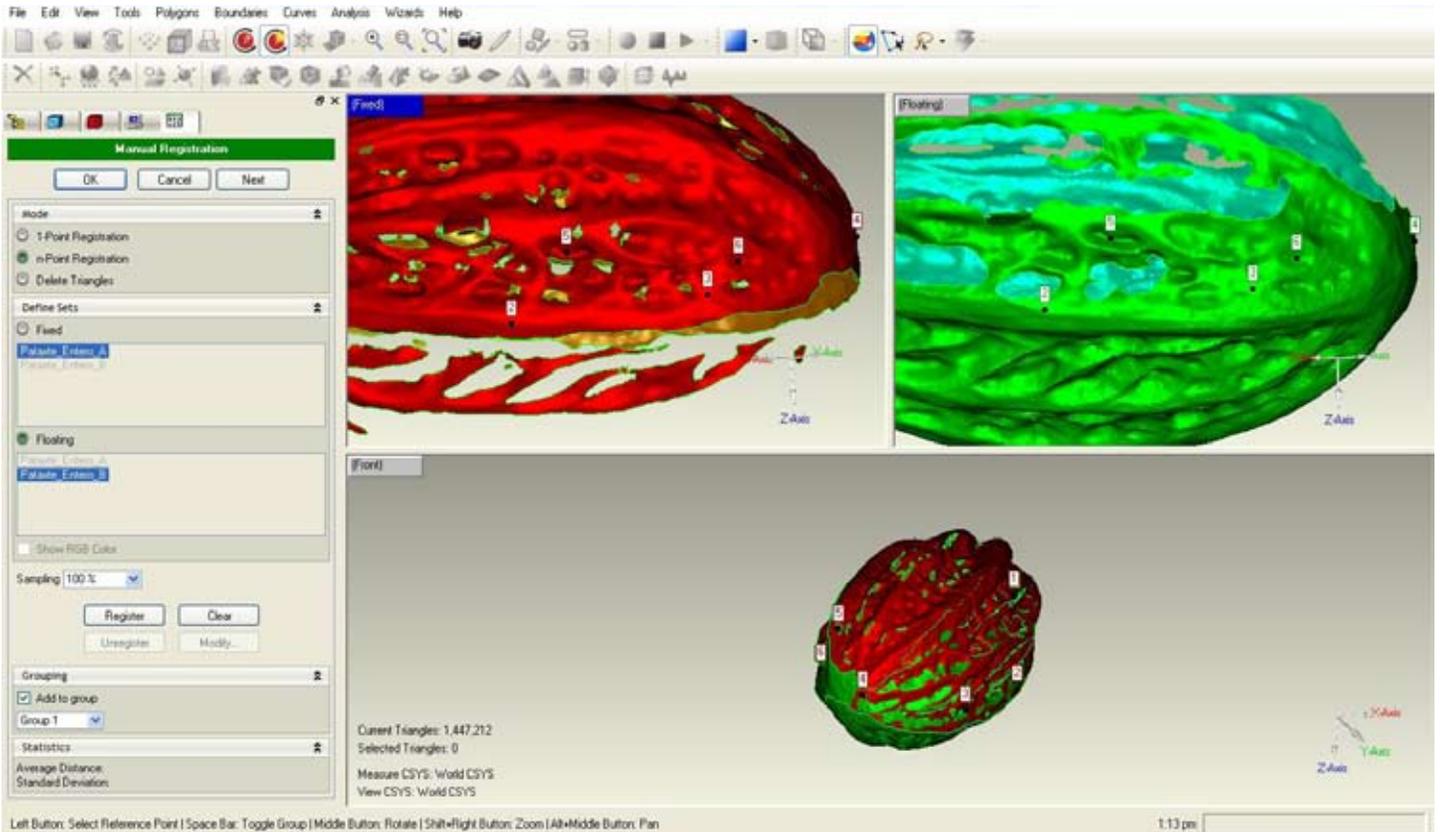
These are the two scans we used to make the complete pataxte.



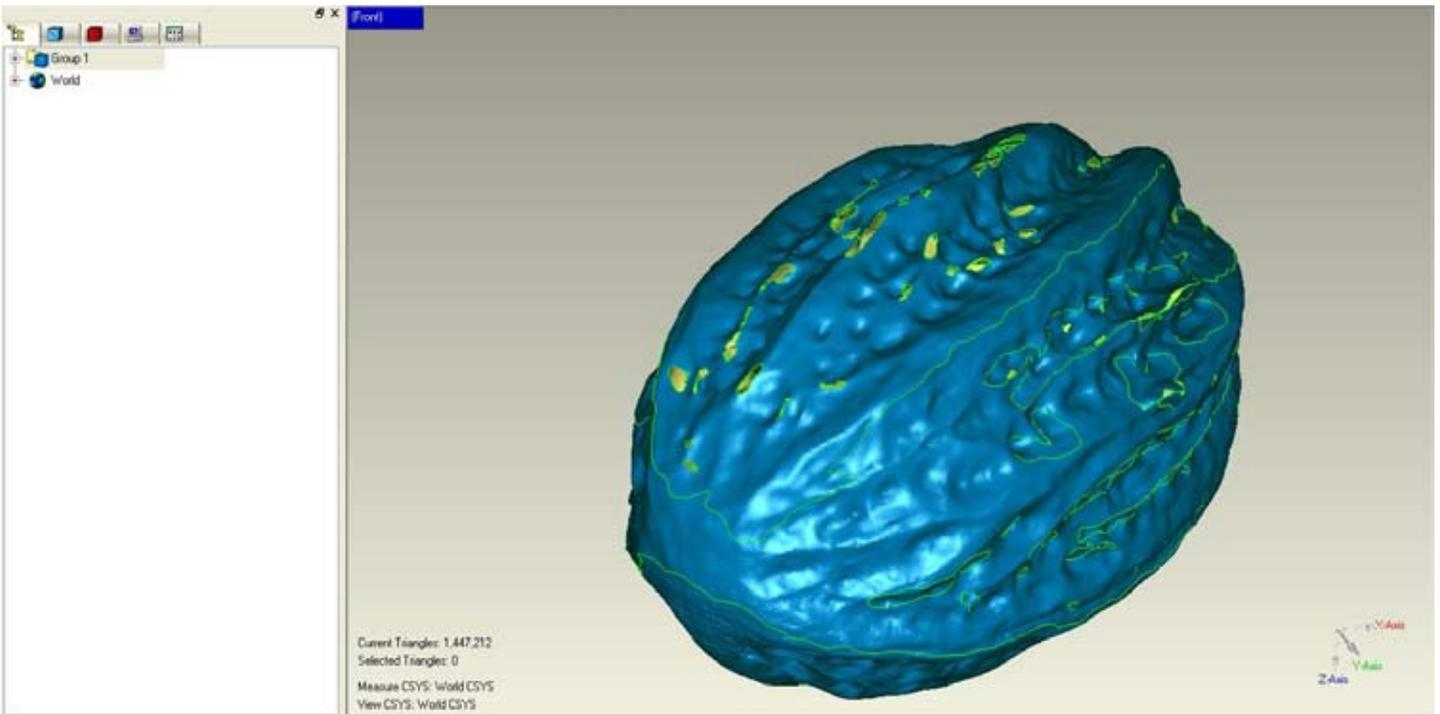
After cleaning up the scans, they are ready to be registered. We selected the two scans from the left panel and then went to Tools > Registration > Manual Registration. Now the viewing area is divided in three. From the left panel we select one scan to be fixed and one to be floating. The bottom frame shows how the scans are being aligned. To make the registration points we move the fixed and floating objects until they are in the same angle and click on the same spots. The registration points are indicated with a number, in this case: 1



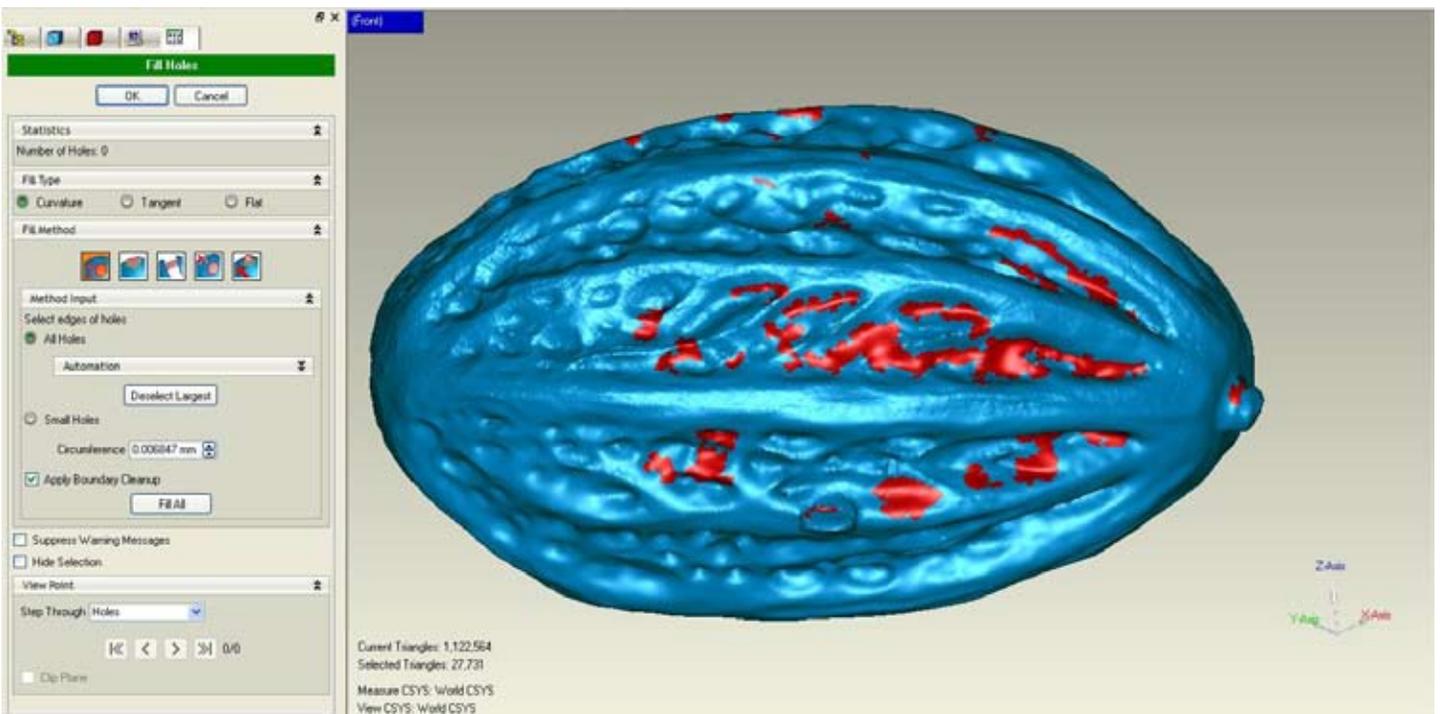
These images show the registration points we used to align the two scans of the pataxte.



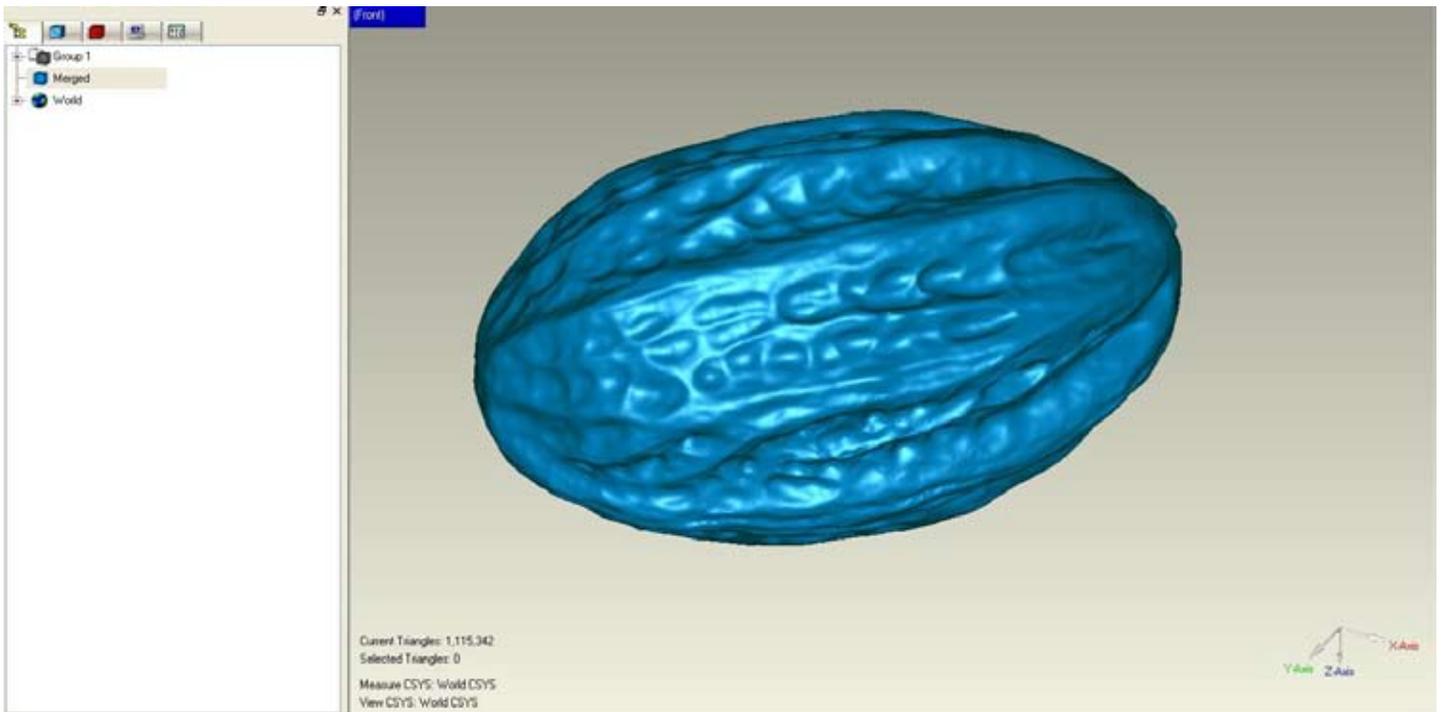
We used six registration points for this object. This image shows the final registration point. When we are finished with the registration points we just click Register and in this case since there is no other scan to register, click OK from the left panel.



The image shows the object after registration. The scans are still separated in the carpet called Group 1, the green lines indicate the border of each scan. So, we applied Merge to transform them into one object. Geomagic keeps the carpet Group 1 and creates an object called Merged 1.



After merging up our pataxte there were several holes in the surface. It is hard for the scanner to capture everything from a surface like this one. So, we applied the Fill Holes tool. The places where there were holes appear in red.



This is the result after filling out the holes.



We applied color to our pataxte to give it a more realistic look. Here you can see the picture of the actual pataxte that was scanned so you can make a comparison.

FLAAR Reports and Reviews on 3D Scanners and Software

