

Addendum to:
Shroud of Turin & Manoppello Image
Comparison & 3D analysis

The magic of ImageJ continues.

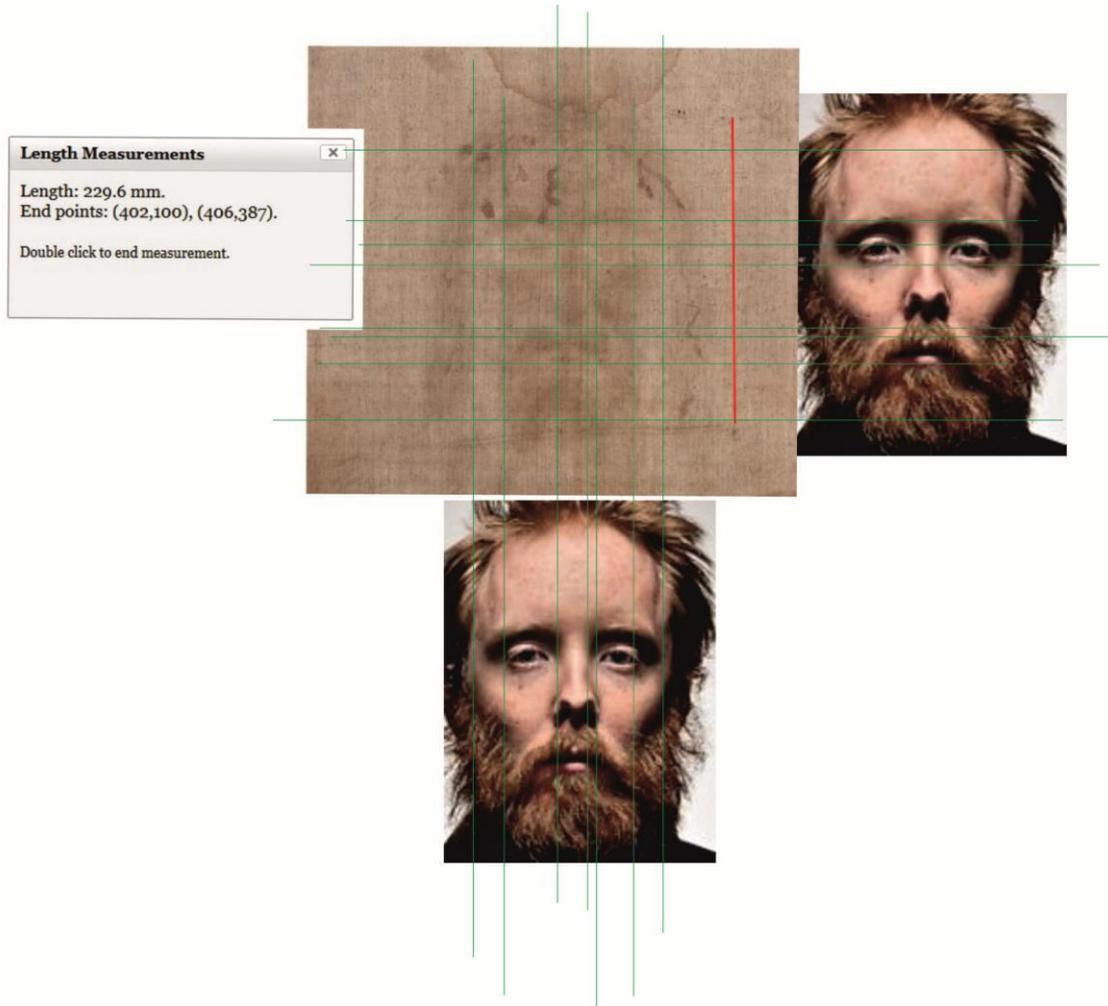
By O.K.

Following [the publication of the first paper](#), there has been some criticism from Hugh Farey, about the lack of control in my comparisons between Manoppello and Shroud faces. In a comment, Hugh wrote:

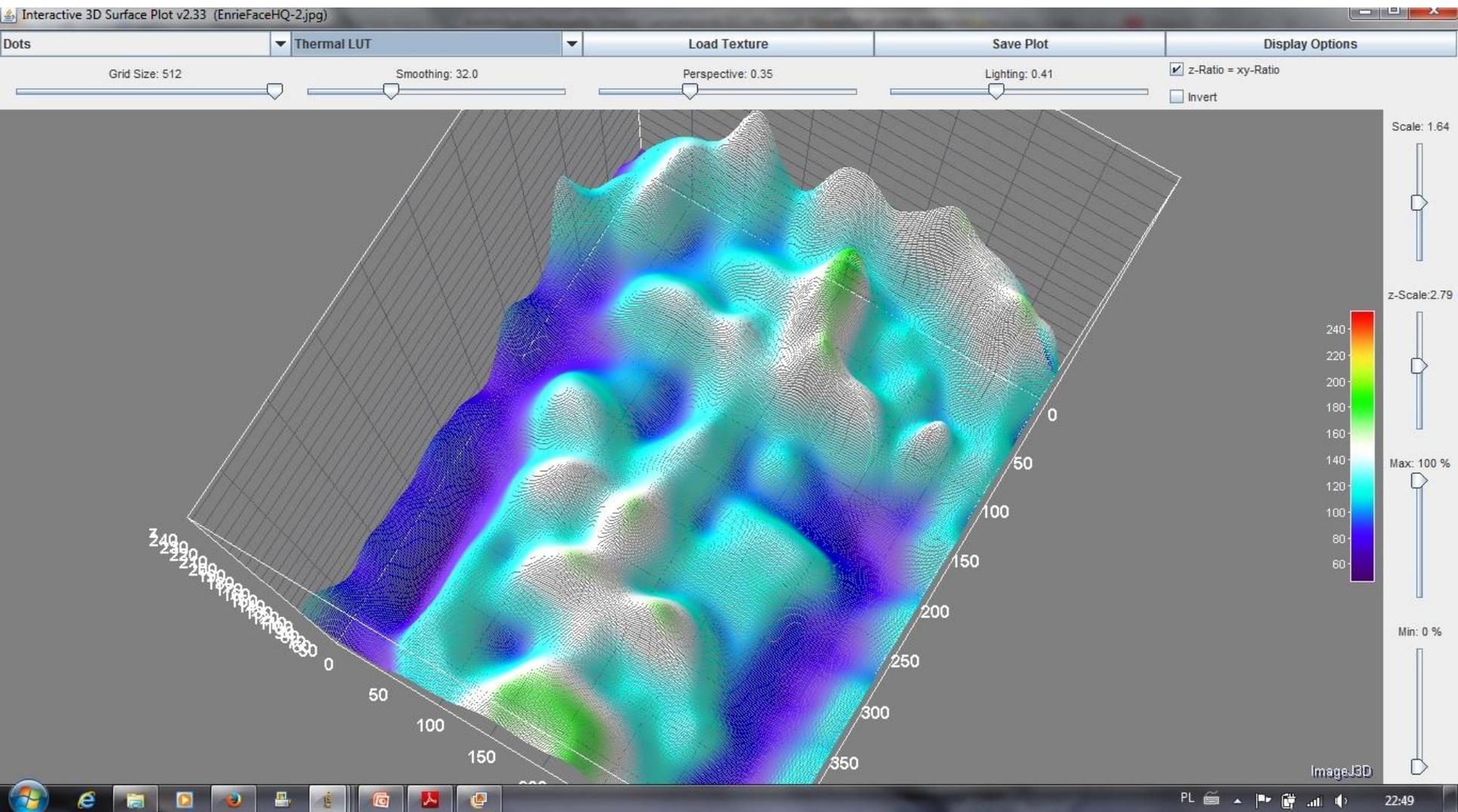
Such Fun! OK is to be congratulated. However, his experiments with ImageJ lack a control, so I recommend the following to anybody with time. [...] For me, pictures of a man with a beard work best. Rasputin matches the Shroud very well (much better than the Manoppello image), as does the actor Brian Blessed, but Kate Middleton was a bit of a disappointment.

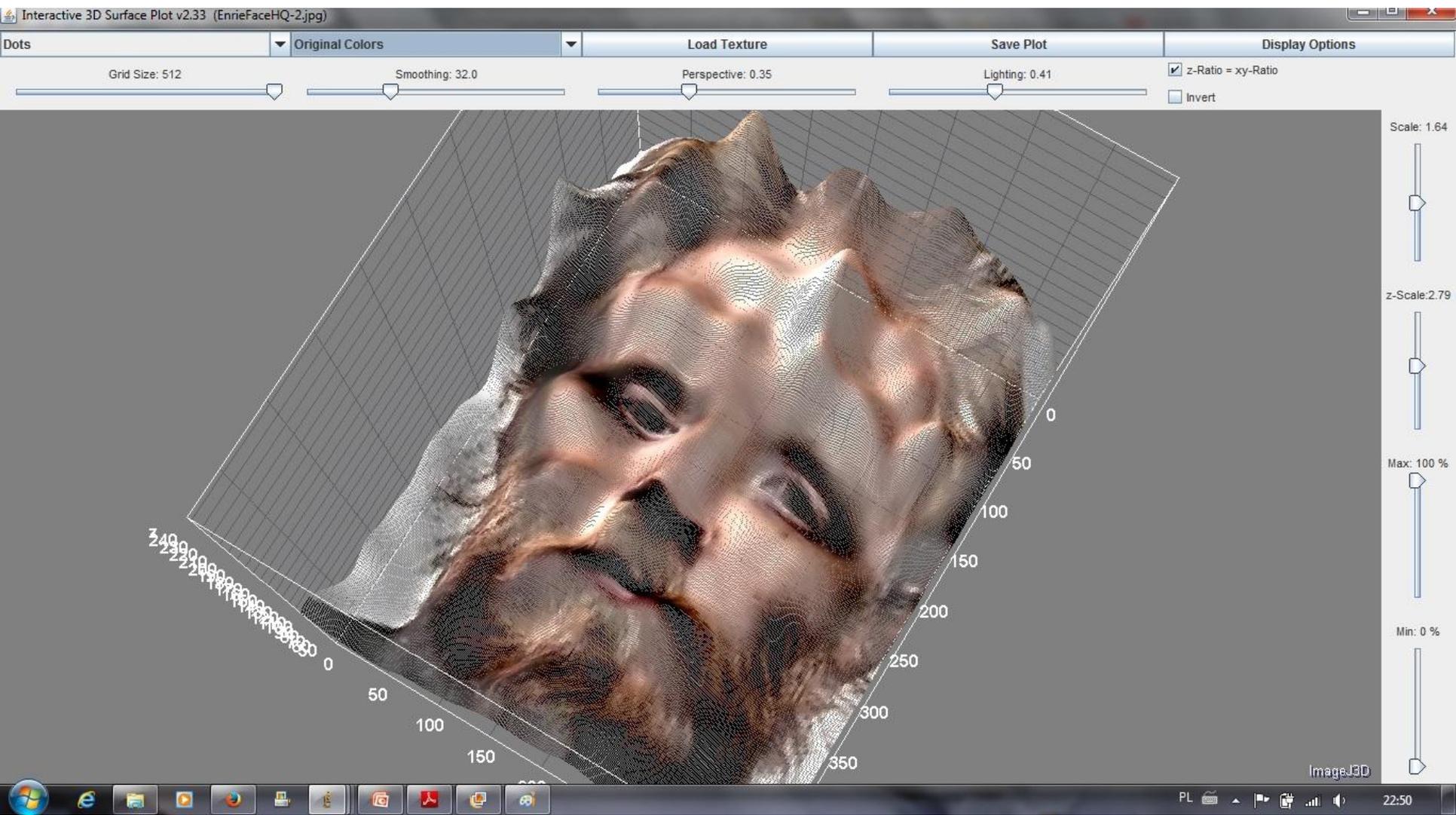
Although the purpose of my previous paper was not proving that Shroud and Manoppello faces certainly must belong to the same person (thus excluding possible false positive error), nevertheless I raise the glove. Let's first deal with Rasputin, then return to Manopello.

Here is a comparison of 2002 Durante Shroud face image, with a drawing of Rasputin provided by Hugh. So far, the condition of basic proportions is fulfilled.

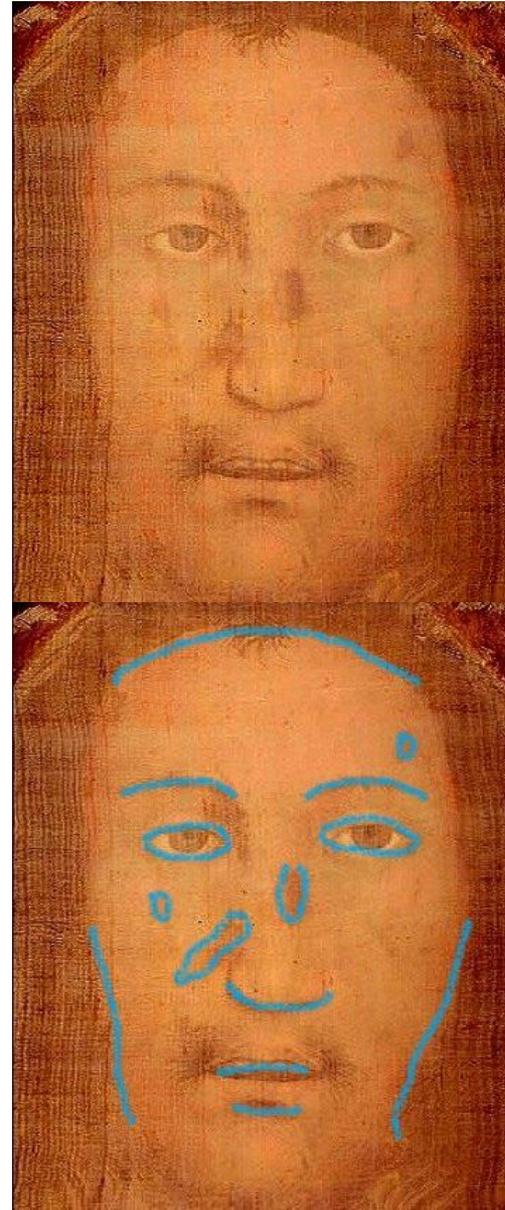
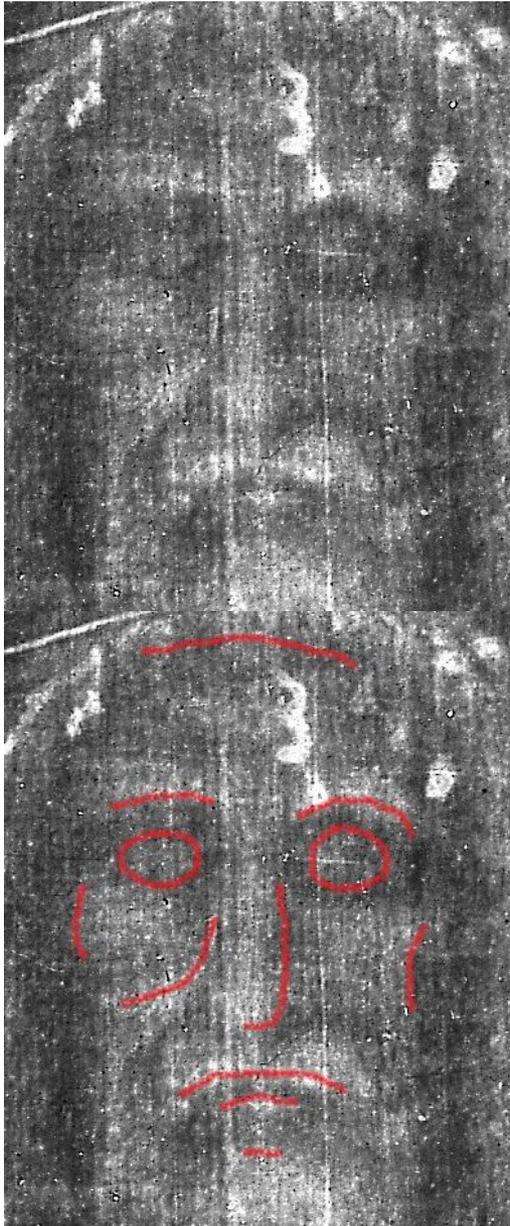


Let's go 3D. As we will see on the next slide Rasputin can be overlaid on the Shroud quite well –we may begin to fear **who** was actually buried in the Shroud of Turin!





Instead of getting terrified, let's return to the Manoppello to make some superpositions of it with the Shroud –but this time with some features marked.



Let's overlay it, applying a little bit translation for the Manoppello (looks easy, but in fact I performed many attempts to find the best position)

The screenshot shows a computer interface for image processing. The main window displays three images side-by-side:

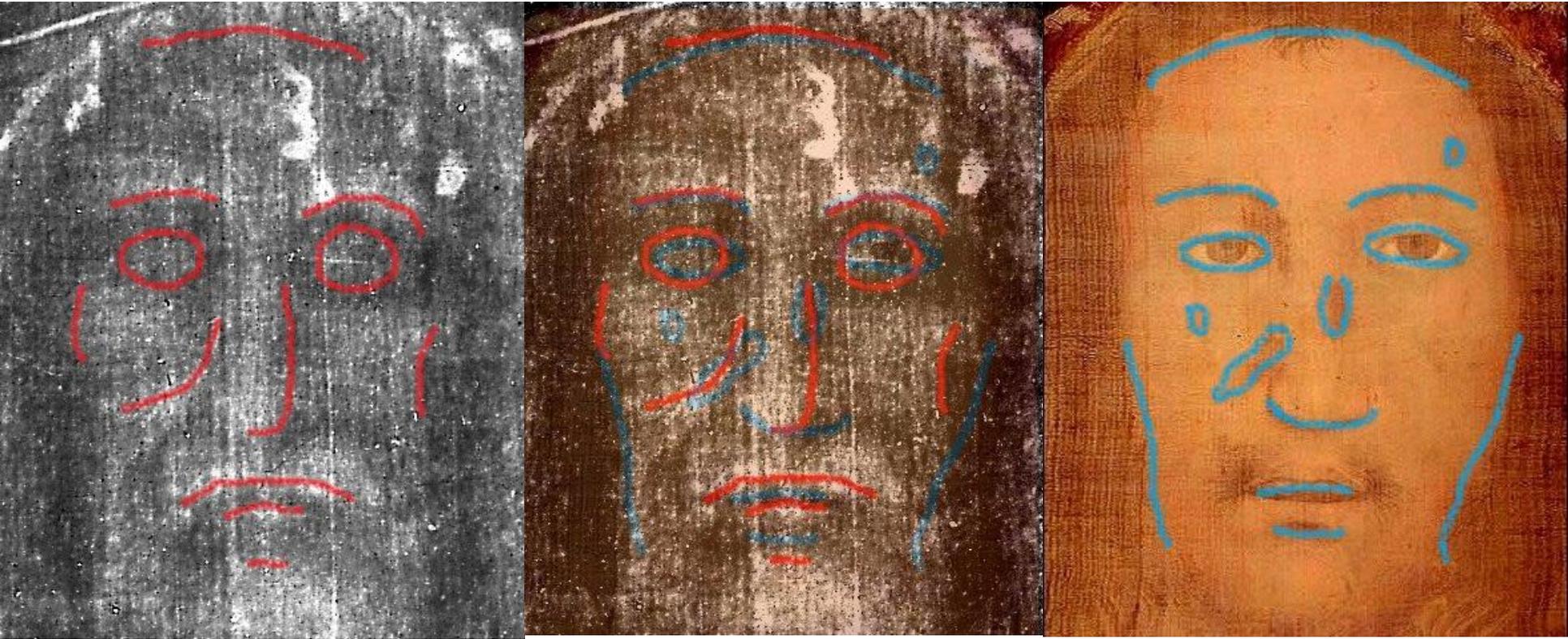
- Left: A grayscale image of the Shroud of Turin with red markings overlaid. The title bar reads "EnrieFaceMarked.jpg" and the status bar shows "393x484 pixels; RGB; 743K".
- Middle: A grayscale image of the Shroud of Turin with blue markings overlaid. The title bar reads "EnrieFaceMarked-1.jpg" and the status bar shows "393x484 pixels; RGB; 743K".
- Right: A color image of the Manoppello Shroud with blue markings overlaid. The title bar reads "ManoppelloMarked-1.jpg" and the status bar shows "393x484 pixels; RGB; 743K".

An "Add Image..." dialog box is open over the middle image, with the following settings:

- Image to add: ManoppelloMarked-1.jpg
- X location: -5
- Y location: 5
- Opacity (0-100%): 50

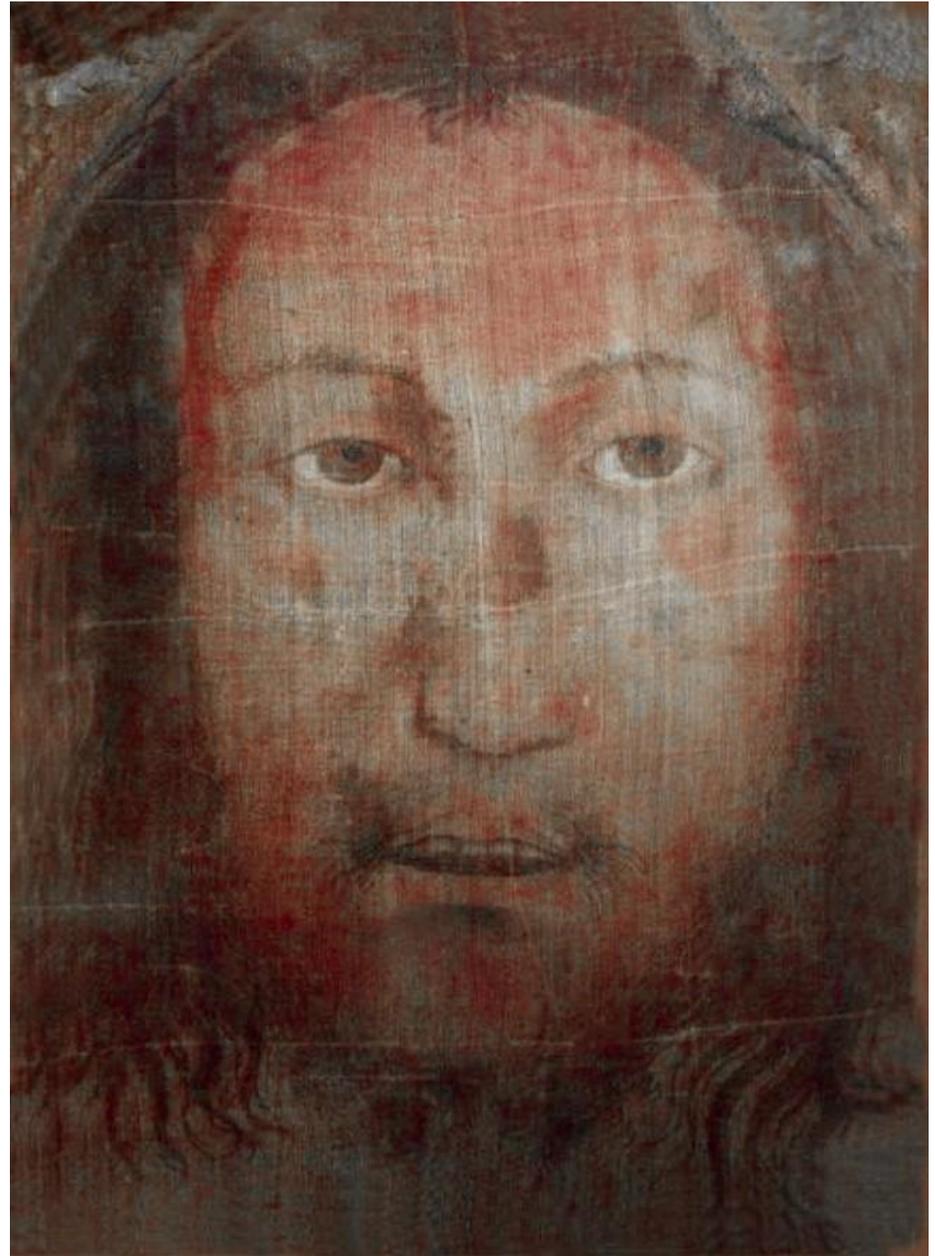
The background shows a web browser with the URL "shroudstory.com" and a WordPress blog titled "Shroud of Turin Blog". The browser's address bar shows "shroudstory.com" and the page content includes "Shroud of Turin" and "Gettysburg? A Picture of the Shroud in 1036?". The system tray at the bottom shows the time "00:23".

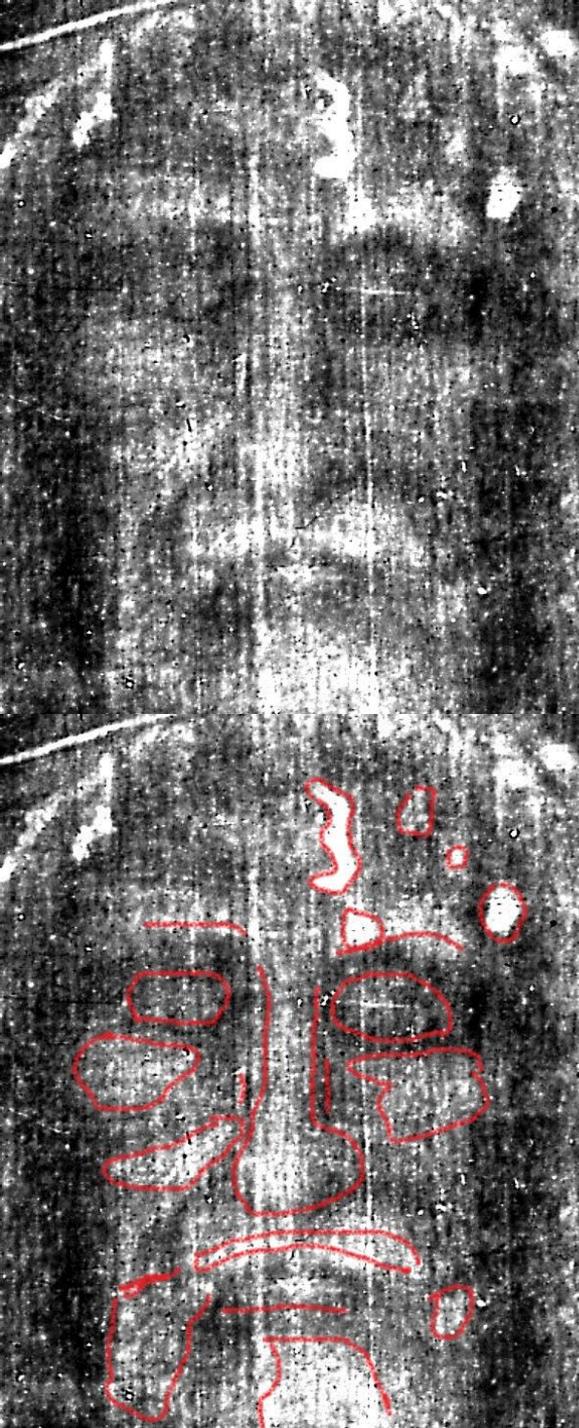
Results:



So far so good, but perhaps it can be done better.

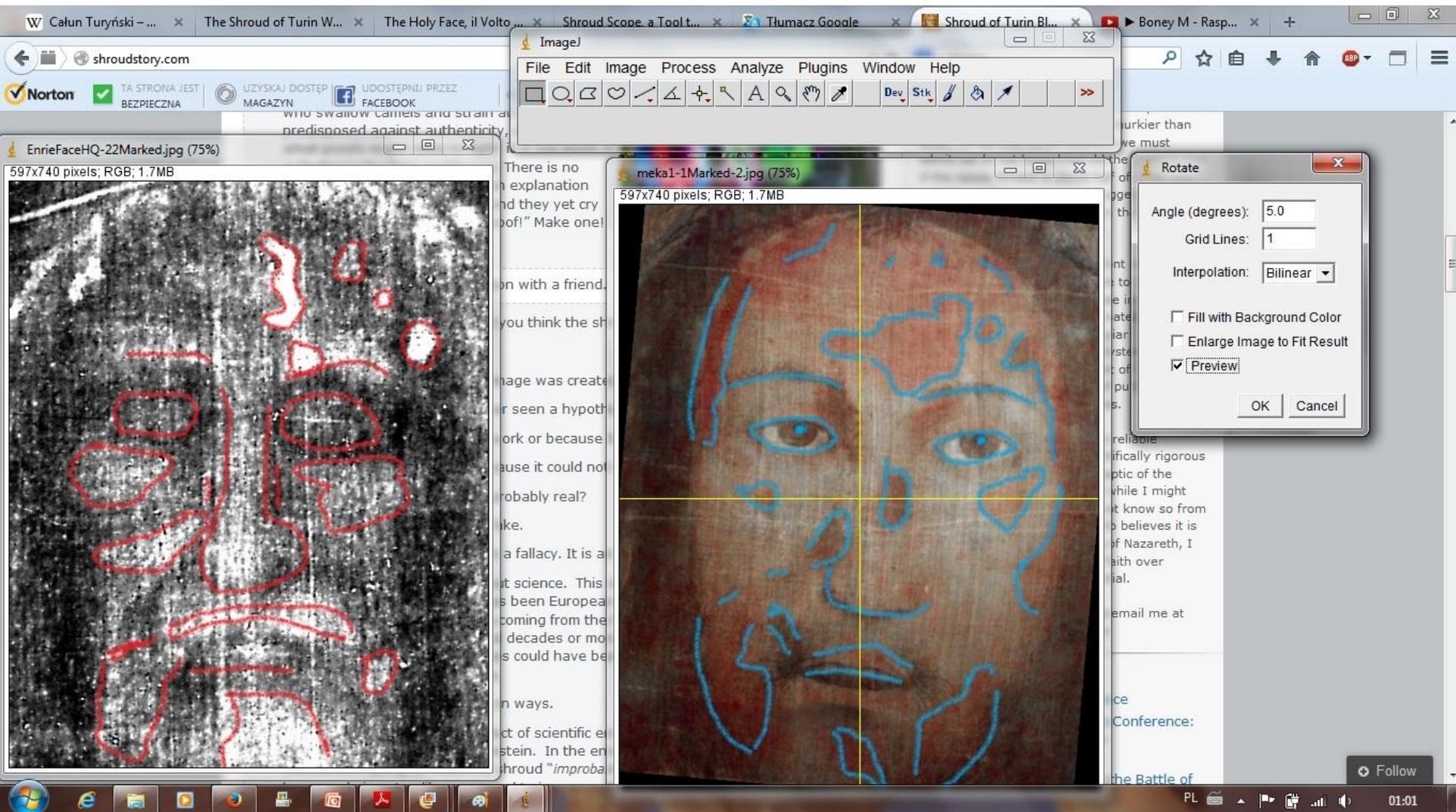
For further analysis, let's use this processed image from [Juliusz Maszloch site](#). It has red component enhanced to emphasize wound marks and blood traces on the face.



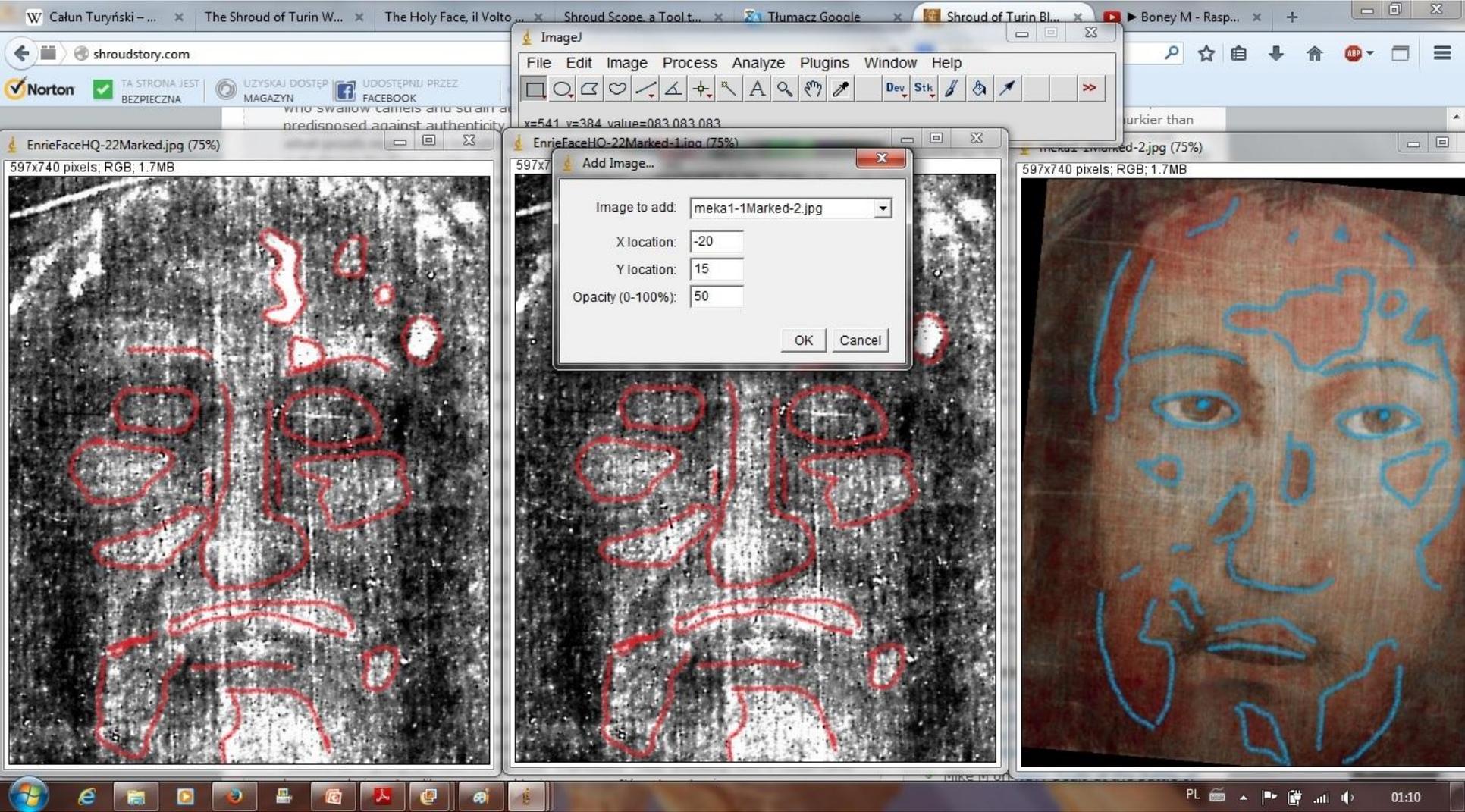


Let's apply markings.

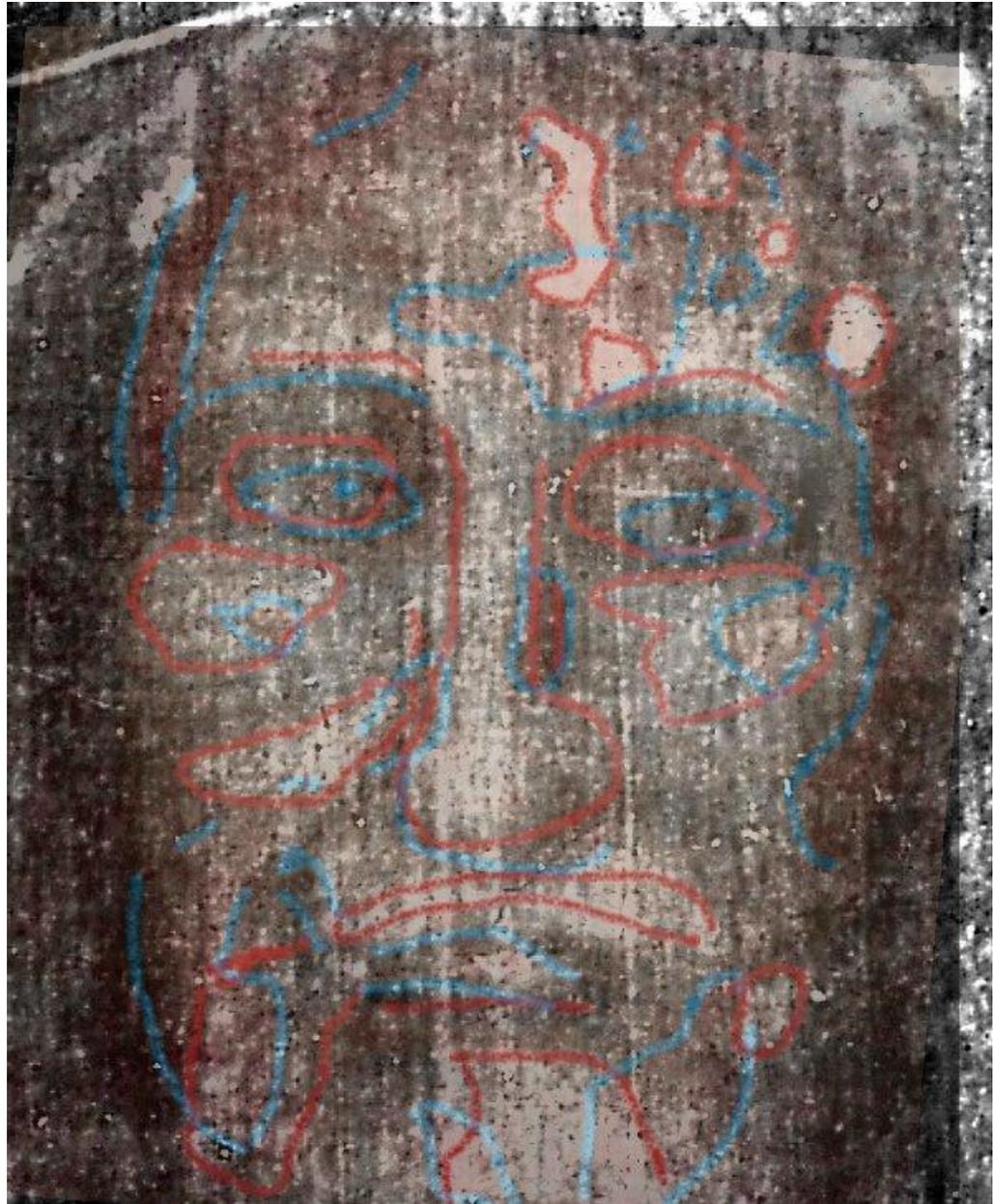
After trimming, and resizing both images, let's rotate Manoppello by a small angle.



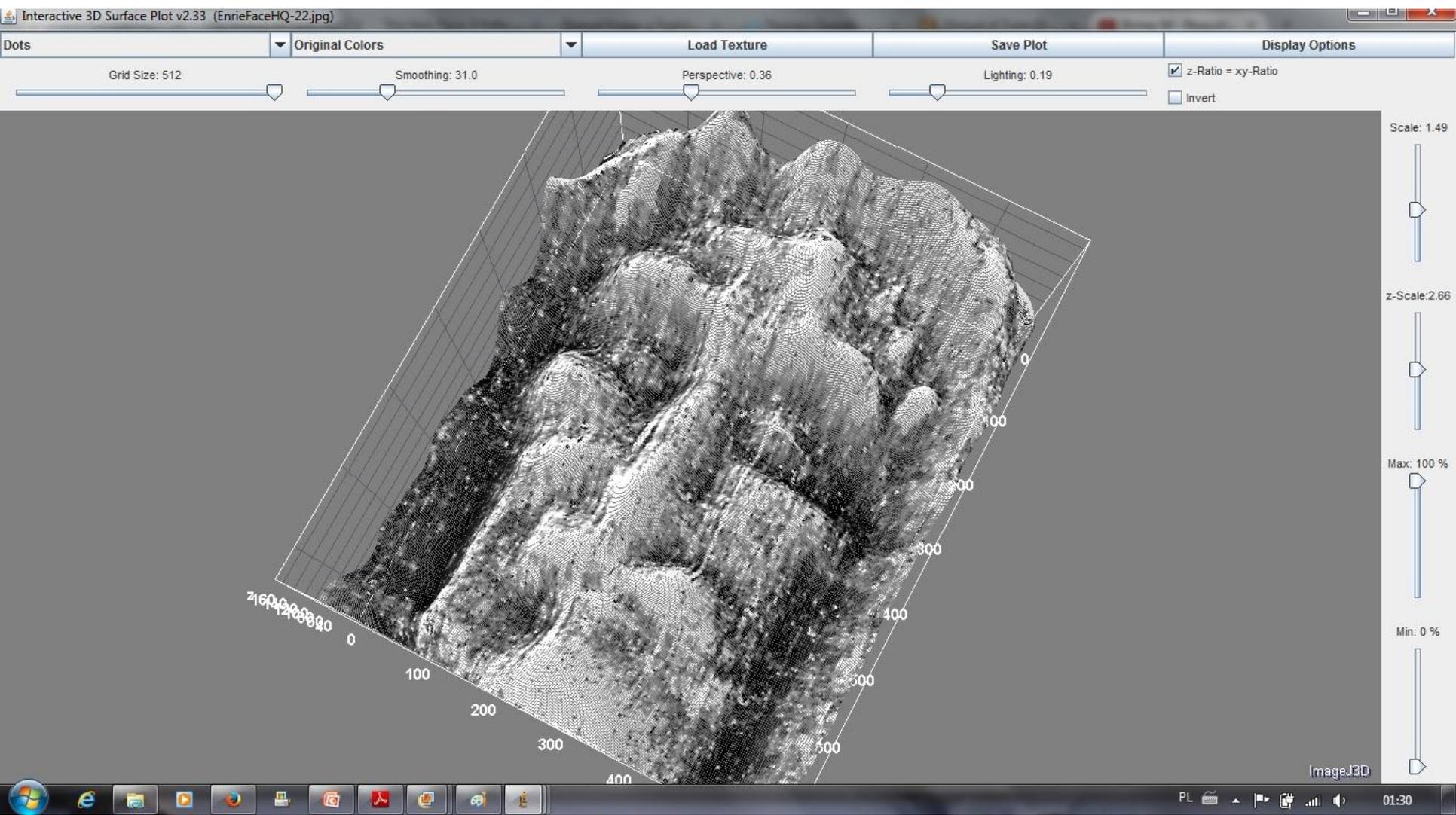
Overlaying:

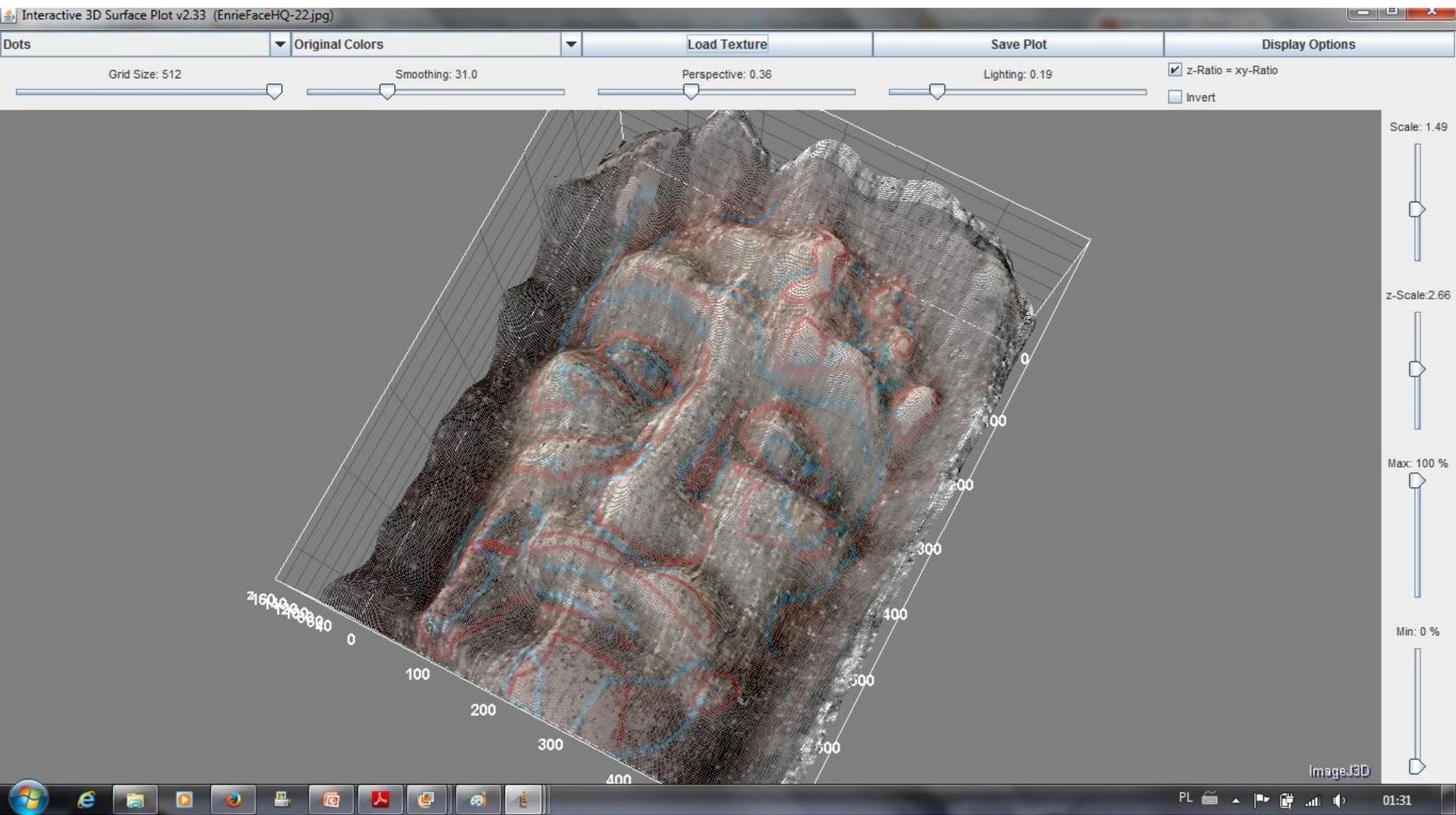


Results:



What about making some 3D, both with overlay and Manoppello textures?

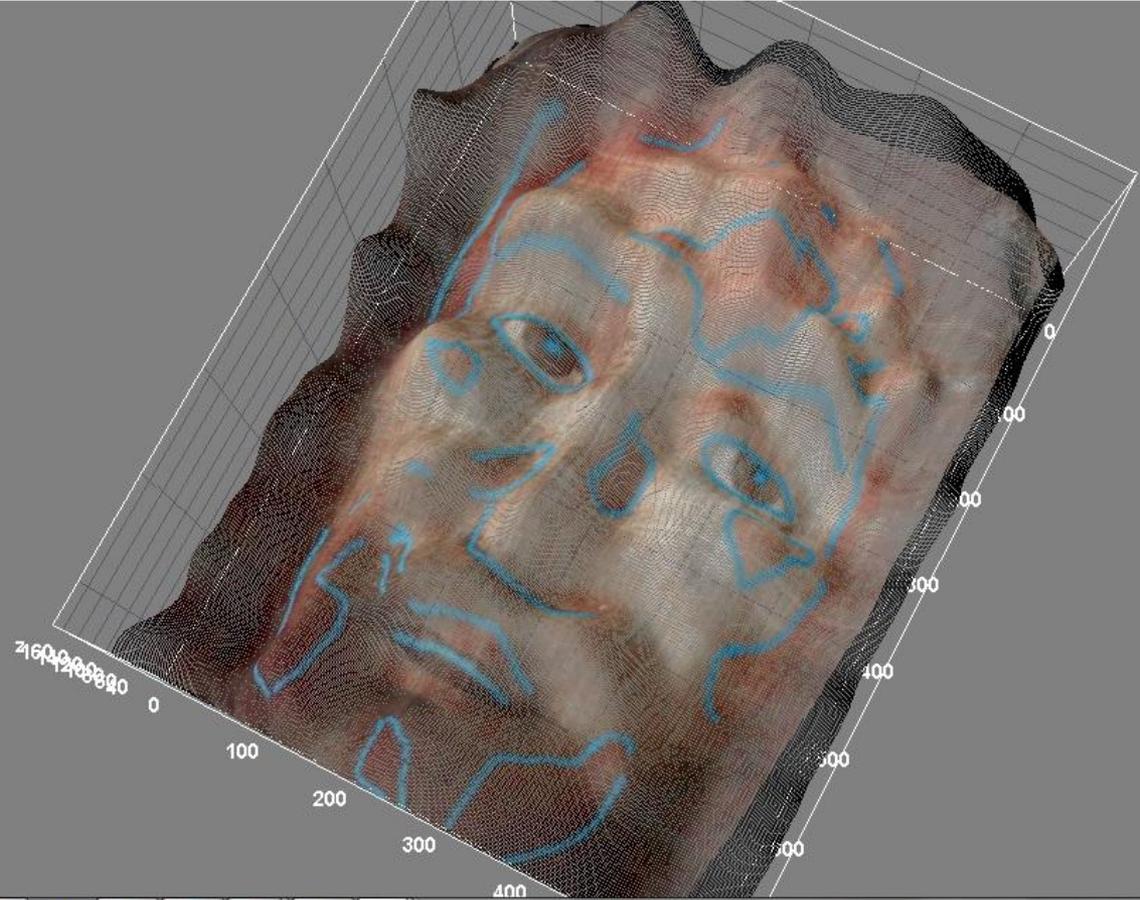




Interactive 3D Surface Plot v2.33 (EnrieFaceHQ-22.jpg)

Dots Original Colors Load Texture Save Plot Display Options

Grid Size: 512 Smoothing: 31.0 Perspective: 0.36 Lighting: 0.19 z-Ratio = xy-Ratio Invert



Scale: 1.49

z-Scale: 2.66

Max: 100 %

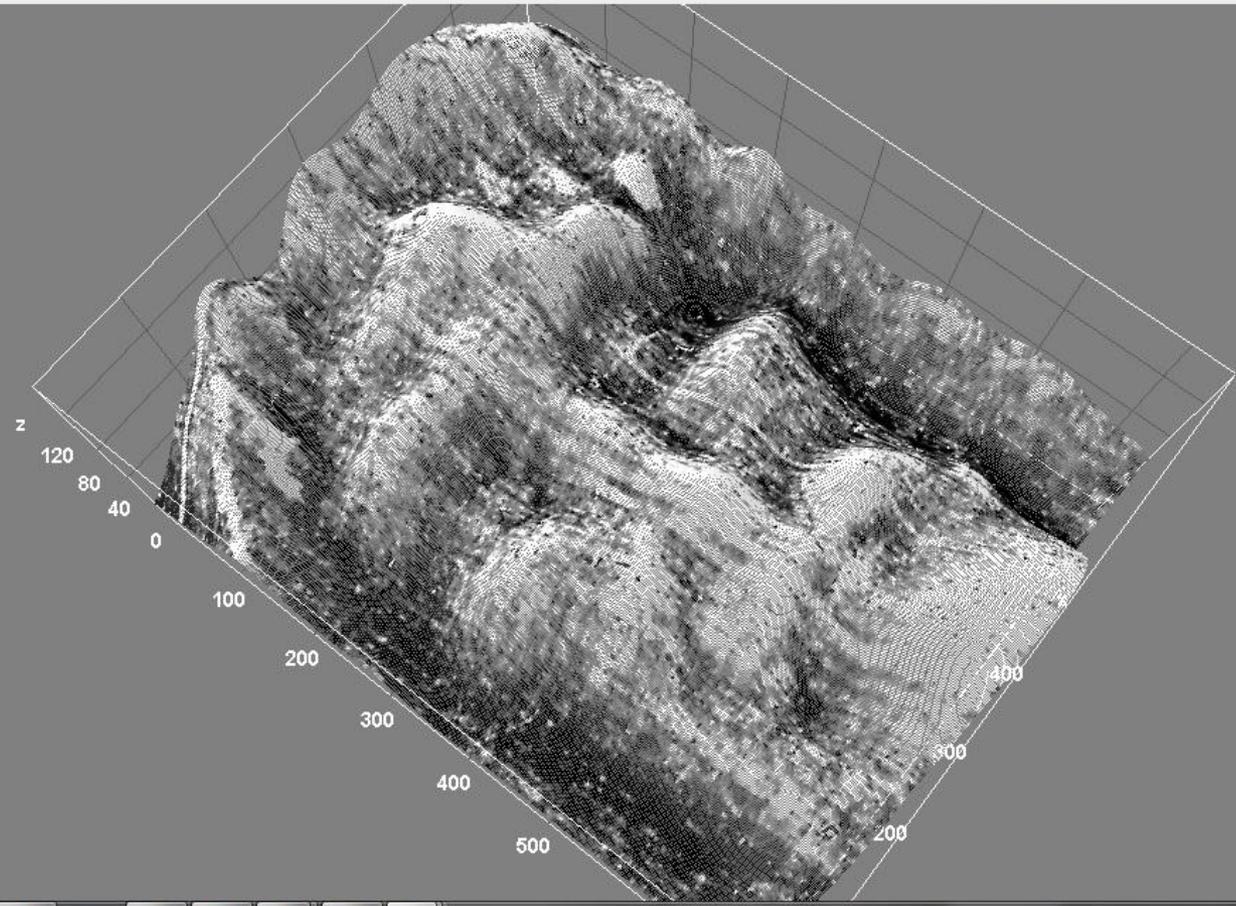
Min: 0 %

ImageJ3D

Windows taskbar showing icons for Internet Explorer, Firefox, and other applications. System tray shows network, volume, and time (01:32).

Original Colors Load Texture Save Plot Display Options

Grid Size: 512 Smoothing: 44.0 Perspective: 0.51 Lighting: 0.23 z-Ratio = xy-Ratio Invert

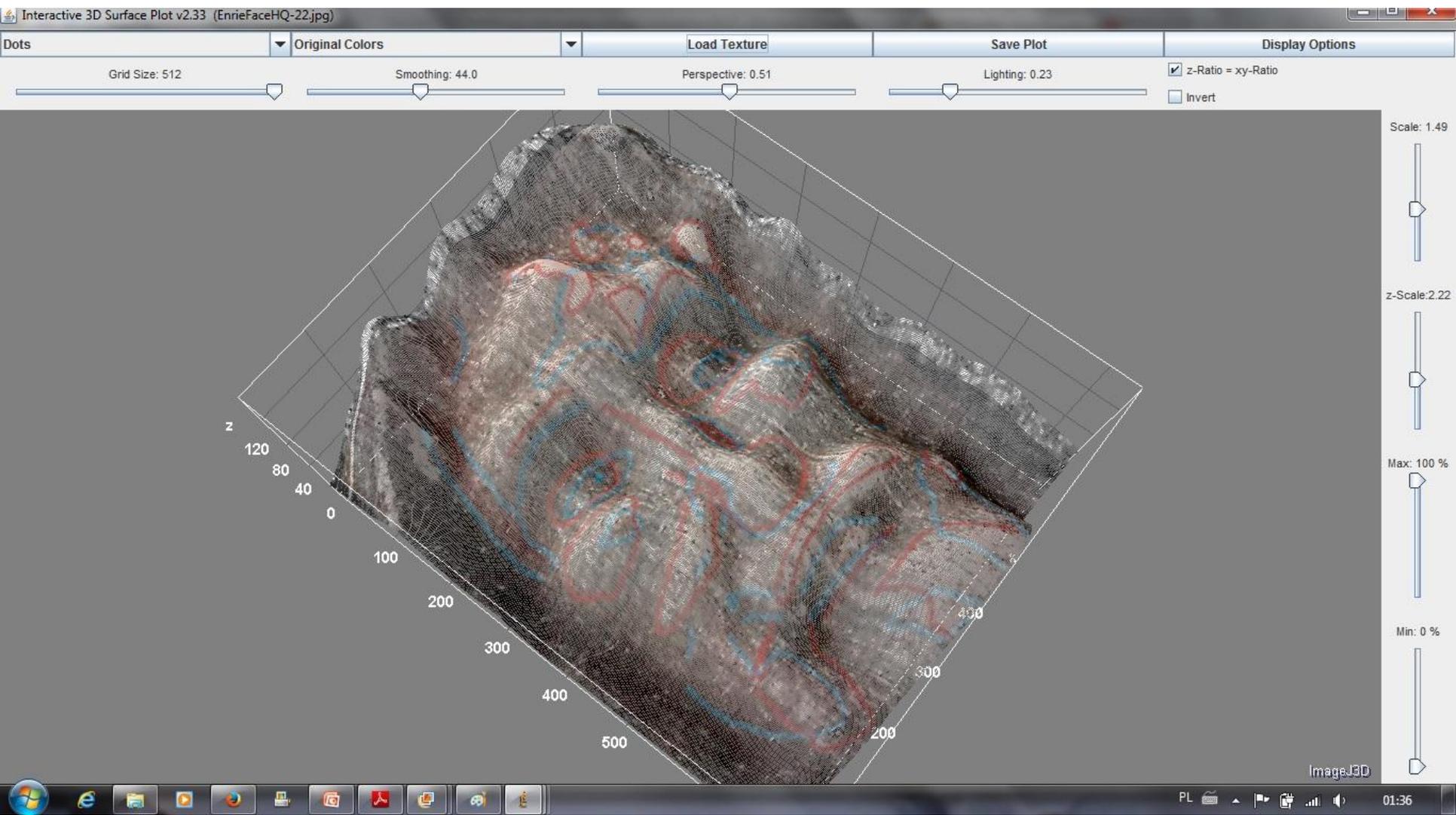


Scale: 1.49

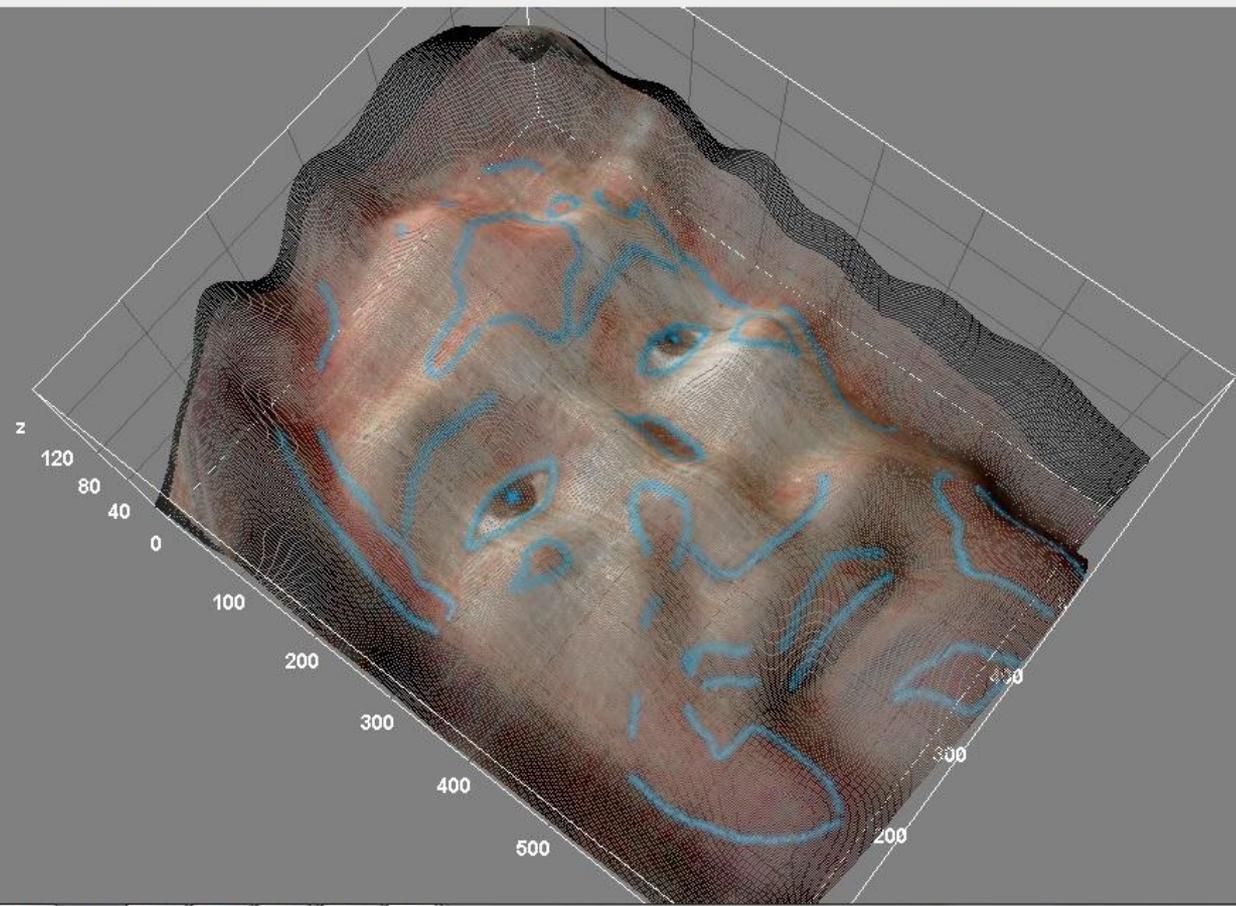
z-Scale: 2.22

Max: 100 %

Min: 0 %



Grid Size: 512 Smoothing: 44.0 Perspective: 0.51 Lighting: 0.23 z-Ratio = xy-Ratio Invert

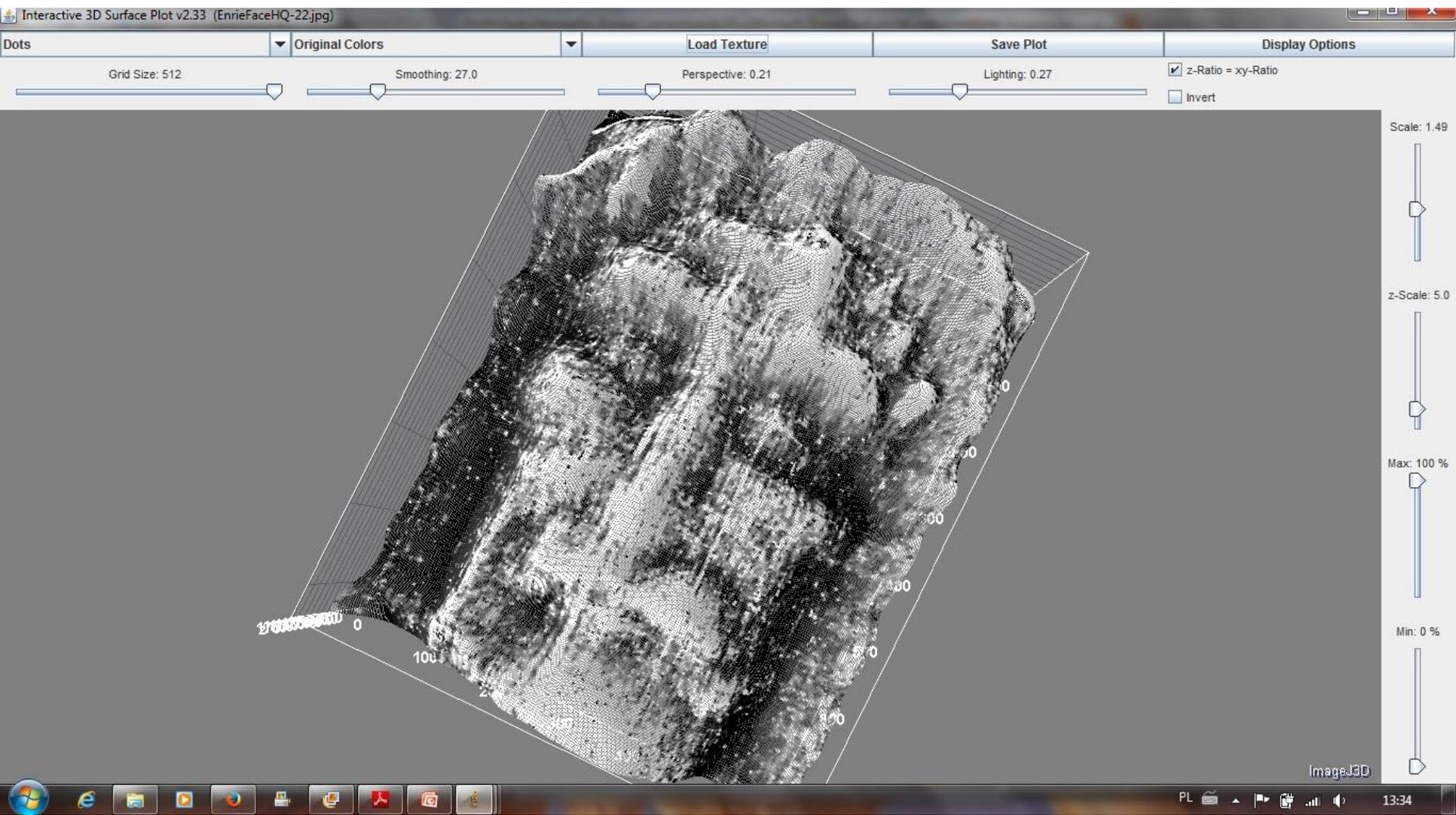


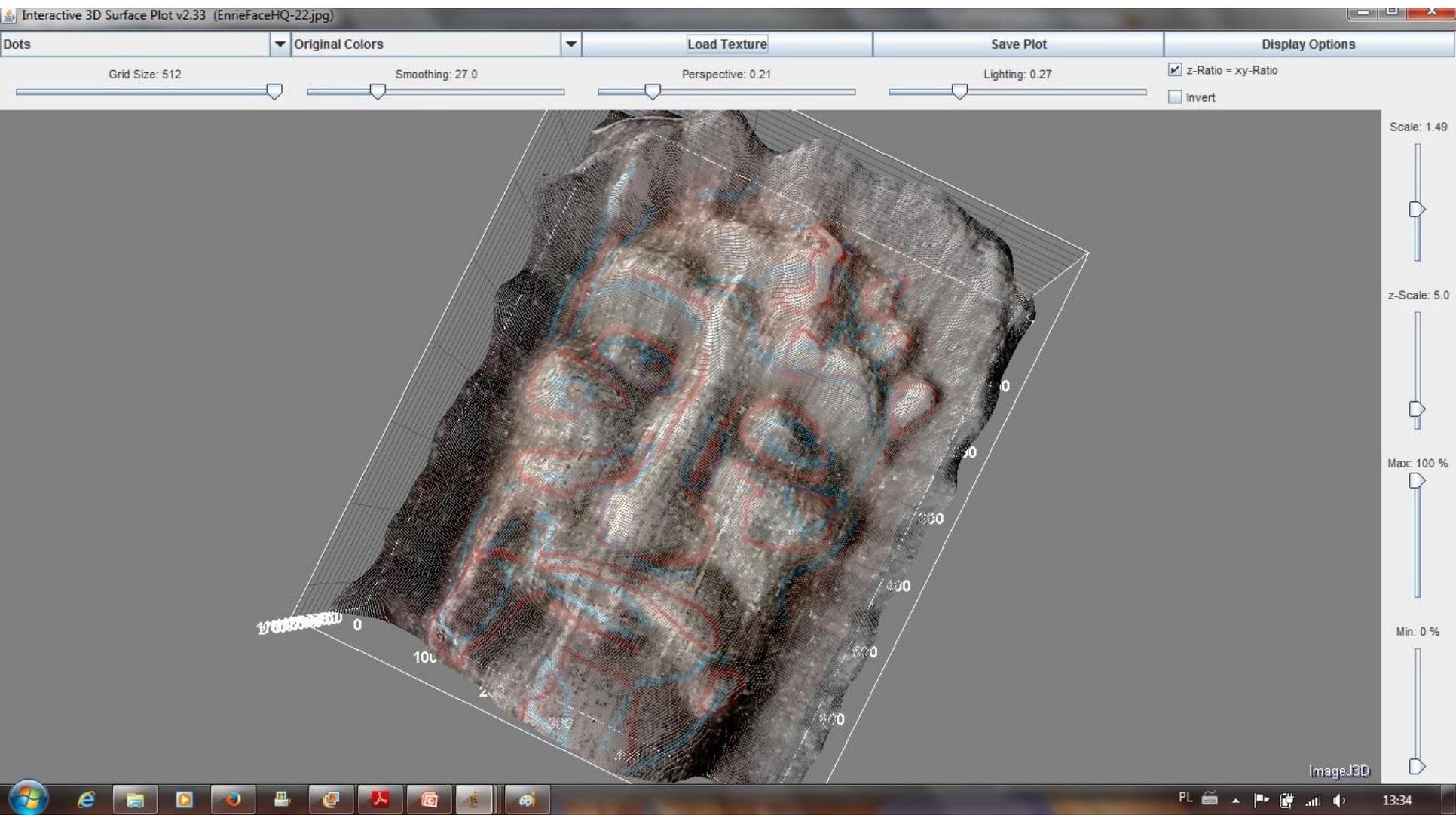
Scale: 1.49
z-Scale: 2.22
Max: 100 %
Min: 0 %

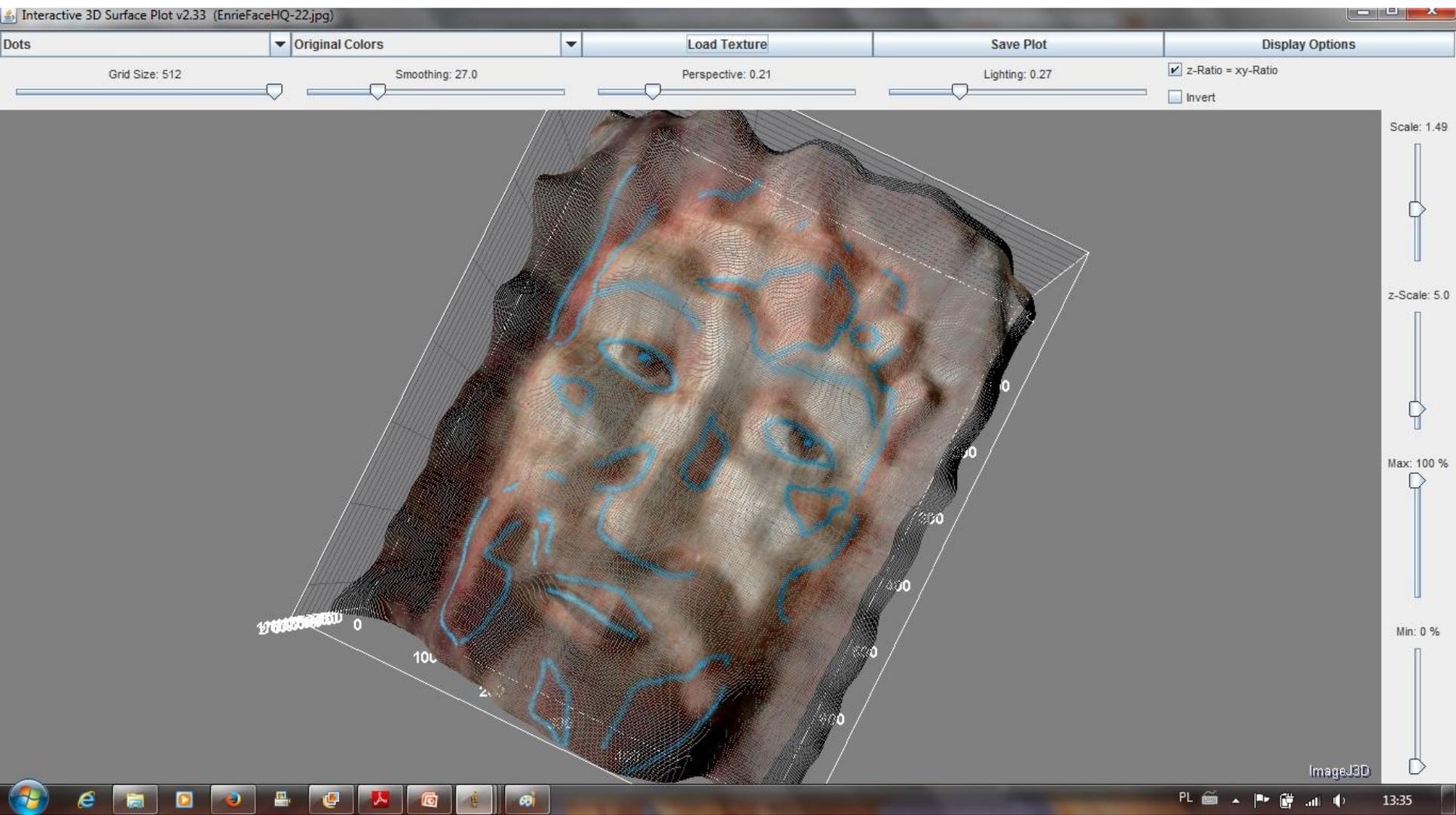


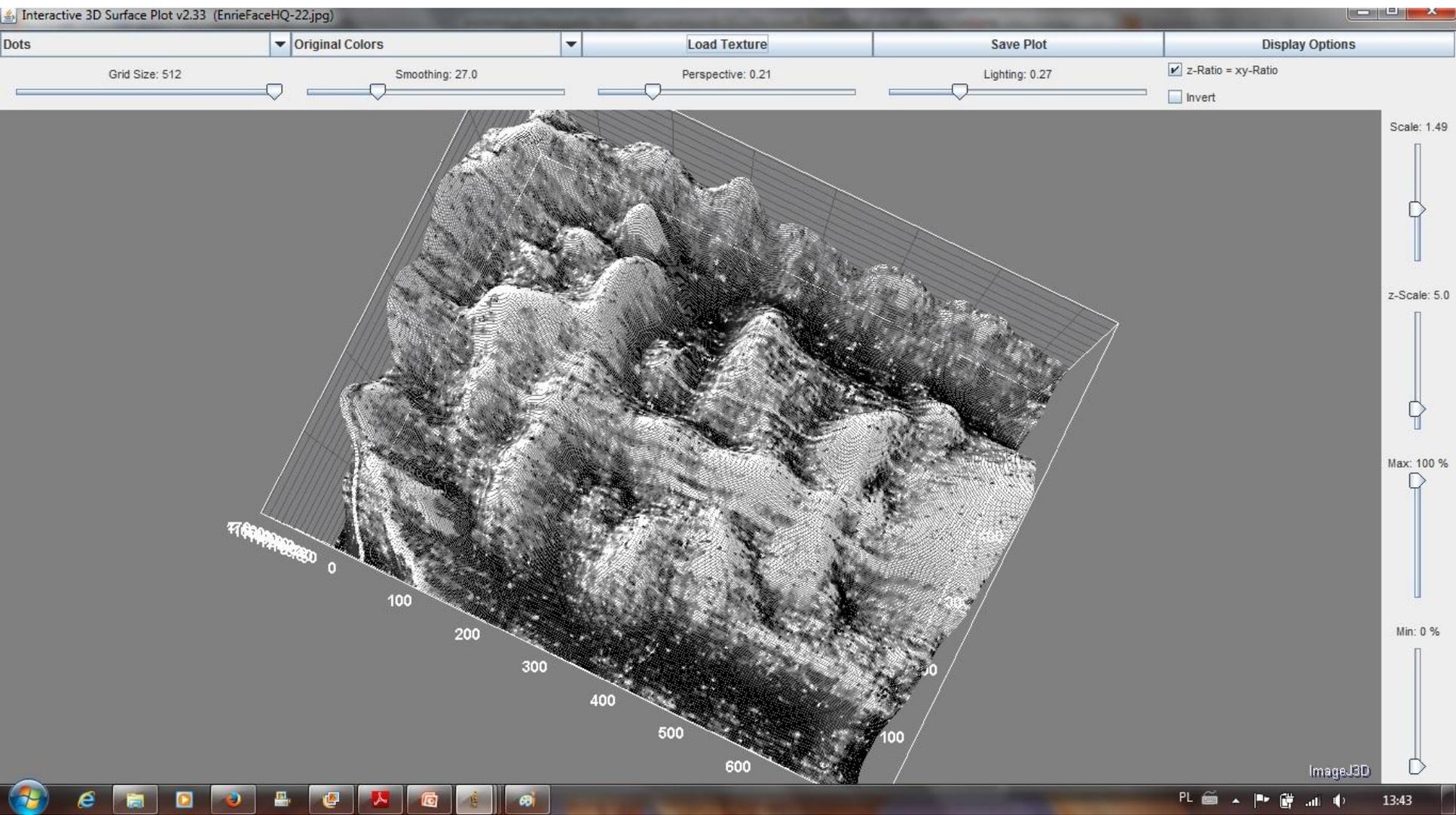
Here is another superposition this time with slightly different parameters (rotation angle = 2° , X offset =-24.0, Y offset =5.0)

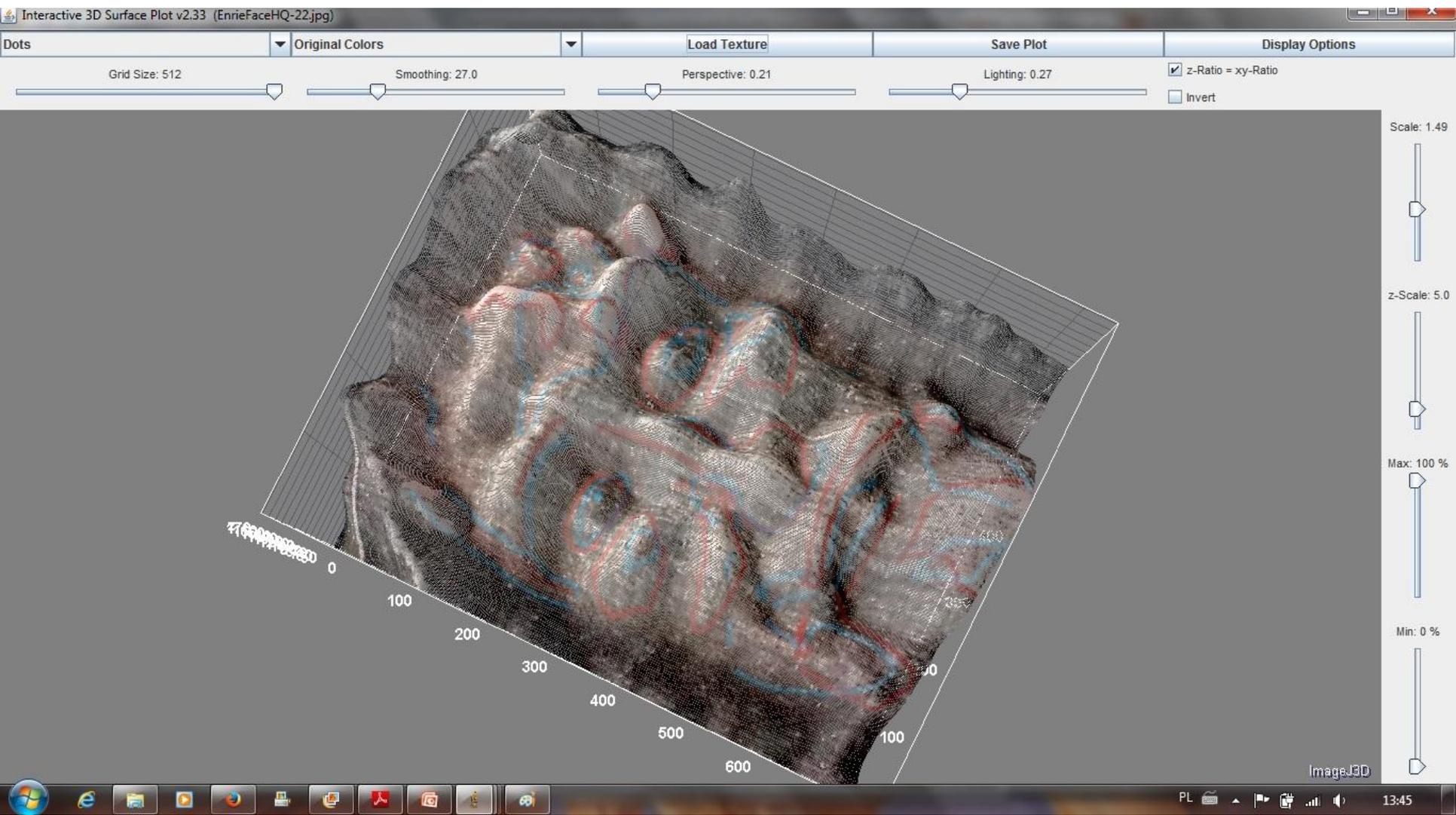
Going 3D:

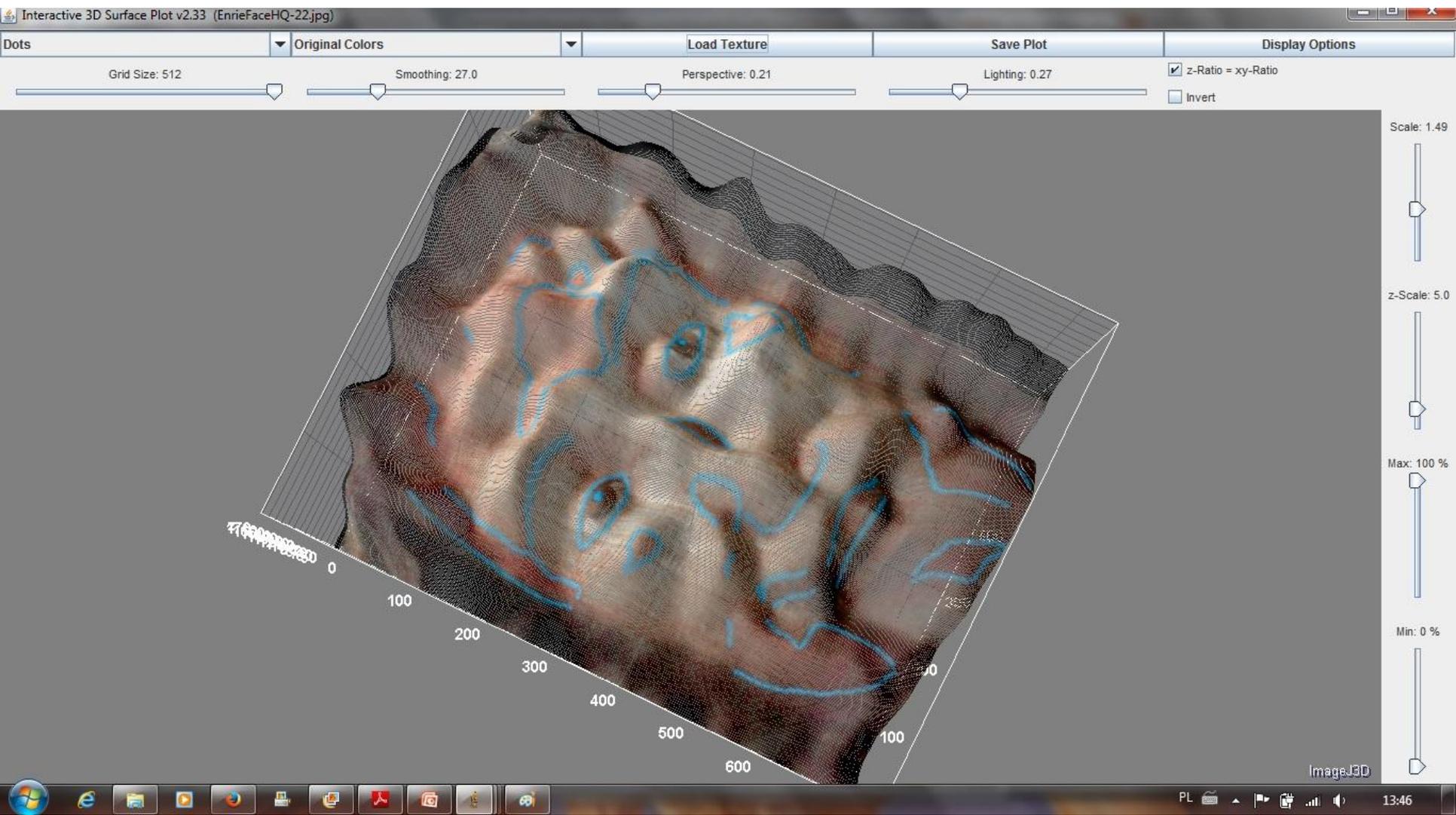








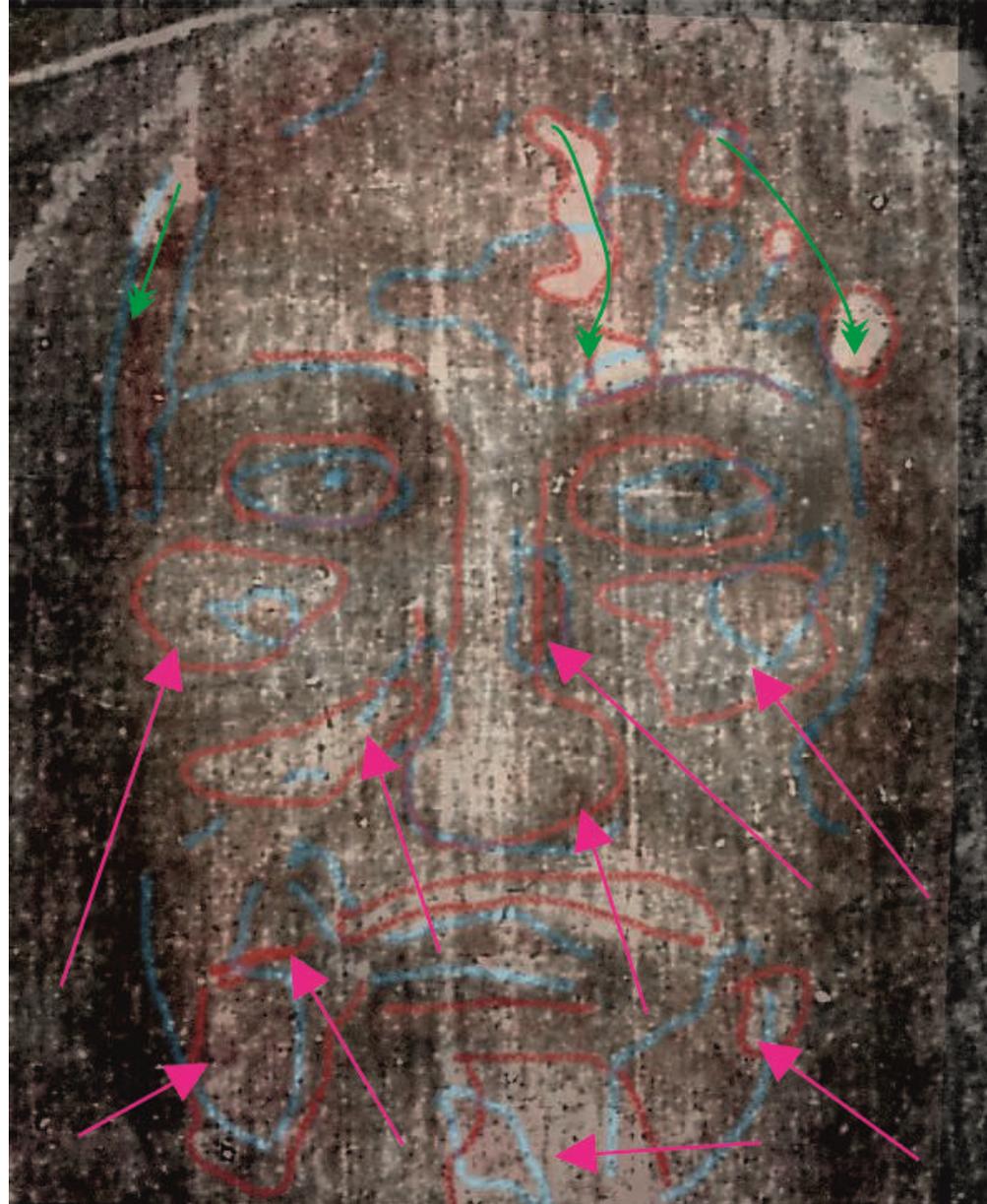




The implications, or why Manoppello is much better than Rasputin.

It is true that some explicitly non-Christ face (including Rasputin) can be overlaid on the Shroud face, with better or worse results. Thus, simple overlaying of the Manoppello face on the Shroud, and finding that their proportions are similar (due to several factors, different mimic for example, they can never be exactly the same), is not yet proof that they represent the same face (similar reasonings were performed in pseudo-scientific publications with Leonardo, Giotto etc.).

However, there are more similarities between Manoppello and Shroud faces than proportions match. Another criteria for a direct link between them is presence of similar features (especially wound marks) on both faces. That's what we call „congruence points“.



Blood flow directions & congruence points on both faces



The final piece of evidence is the struck in the face by high priest servant:

When He had said this, one of the officers standing nearby struck Jesus, saying, "Is that the way You answer the high priest?" –John 18:22 (NASB)

In original: ταυτα δε αυτου ειποντος εις των υπηρετων παρεστηκως εδωκεν ραπισμα τω ιησου ειπων ουτως αποκρινη τω αρχιερει - the phrase εδωκεν ραπισμα (edoken rapisma) may also mean striking with some stick (potrayed by orange lines). It left bruises and swellings on both sides of the nose, which was tilted slightly left (apparently enlarging left nostril –that is Vignon mark 8) –it is visible on both Shroud and Manoppello. It seems that the high priest servant was left handed!

Conclusions and arising questions:

- In my humble opinion there can be no doubts that both Shroud and Manoppello faces are directly related to each other.
- But first let's familiarise ourselves with opinion of some other, often highly acclaimed Shroud researchers:
- [Ian Wilson in article from BSTS Newsletter No 50 \(Nov 1999\):](#) *Strongly against Pfeiffer's theory is that the Manoppello face has every semblance of having been painted by an artist in a style suggestive of the late 15th to 16th centuries. It has nothing of the Shroud's style-less, outline-less, photographic character. Furthermore Rome's continued possession of a cloth certainly still purported to be the original Veronica is well documented. In the year 1617 the artistically-inclined papal secretary Piero Strozzi made six 'facsimile' copies from this original Veronica, one of which copies was presented to Queen Constance of Poland. This latter can still be seen in the Schatzkammer (Treasury) of the Hofburg Palace in Vienna. It, and not the Manoppello cloth, corresponds to the more reliable depictions of showings of the Veronica dating from before the destruction of old St. Peter's.*

- [Mark Guscini's relation from Nice symposium 1997:](#) *According to the Sister, the Manoppello veil is the original Veronica, a miraculous image of Jesus in its own right. She argued that it matches the face on the Shroud because the distances between the eyes and the nose are the same, etc. At that point I began to wonder what I was doing at the Symposium. I am sorry to be so negative and cynical, but that's really how I felt at that moment.*
- [And relation from 2001 Dallas conference:](#) *Michael Hesemann played part of a video film that he is making, explaining that the Manoppello veil is not the Veronica (as has already been made perfectly clear by Ian Wilson some years ago)*

Well said, Mr Guscini, negative attitude, preconceptions, cynicism and ignorance often prevails in Shroud studies –unfortunately.



Left to right: *St. Veronica* by Robert Campin, Master of Bruges (both 15th century),
Manoppello Image with perpendicular illumination.

As we have seen, there is a direct relation between Shroud and Manoppello faces. The problem is, what is nature of this relation. Two basic hypotheses come into mind:

1. (Pro-authenticity) Both Manoppello and Shroud are real burial clothes of Jesus. The Manoppello was laid on the face of Jesus over the Shroud. The image on it was created miraculously during the glorious Resurrection ([see for example here](#))
2. (Sceptical). The Manoppello is simply a painting derived from the Shroud. Someone at some point laid it on the Shroud and made a drawing of the Shroud face (see for example Tarnowski, pg. 161-168).

Of course those two hypotheses do not fulfill the whole space of possibilities –but can be considered main.

There are several problems for this second theory:



As we know, due to low contrast with background and lack of contours the image on the Shroud is almost invisible from close distance -one needs to be 1-2 meters from it to see some features. How to obtain such accurate match from that distance?

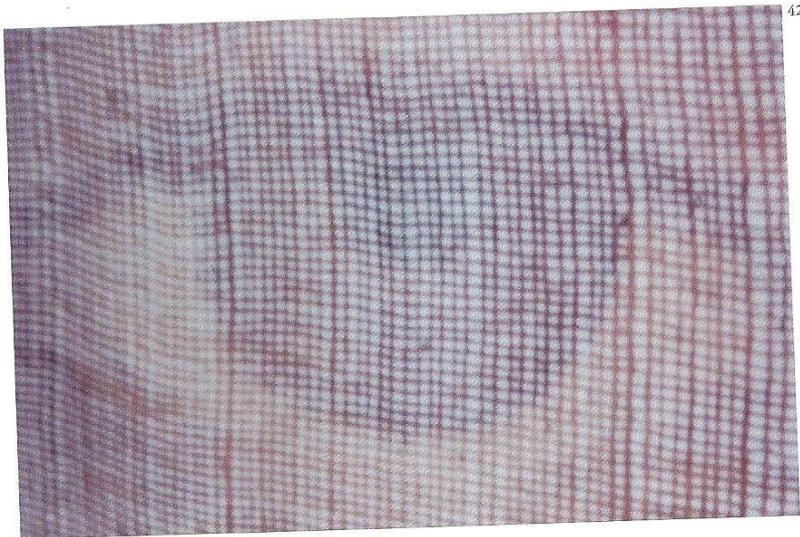
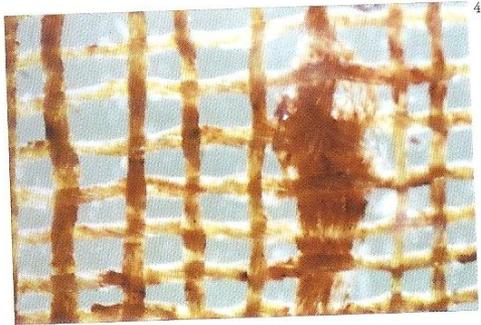
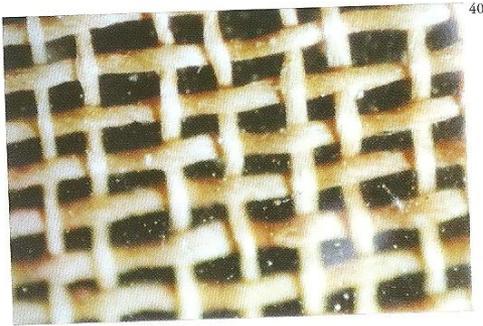
There is no dye between threads on the Manoppello Images, except for a few touch-ups, especially in hair and pupil areas (see scan from Saviero Gaeta's book on the left, see also [Roberto Falcinelli's paper](#)). The question of possible pigments on the threads themselves remain open.

40-41-42. *Plótno z Manoppello w powiększeniu.*

Wysoka rozdzielczość zdjęć profesorów Giulia Fantiego i Donata Vittorego umożliwiła potwierdzenie braku koloru w przestrzeniach między niciami.

Połysk nici skłonił eksperta Chiare Vigo do wysunięcia hipotezy, że włókna są z bisioru.

Sz szczególnie prawe oko Oblicza wykazuje ślady koloru jednej źrenicy, być może z inicjatywy Kogoś, kto pragnął dać więcej siły spojrzeniu.



According to Fanti's report (quoted by Falcinelli): *No chemical tests have yet been carried out on the image of the Holy Face, which makes it impossible to draw certain conclusions; however, in some areas, like around the pupils and the hair, the presence of pigment has been ascertained; the paint is possibly due to some Middle Ages retouch. For the moment we cannot rule out that the whole cloth was painted in watercolour technique.*

According to [Donato Vittore's article](#): *The Relic of Manoppello is not an oil-painting because there is no deposit of colours among the threads; it is not a water-colour painting because the outlines of the eyes and of the mouth are so clean while the water-colour would have soaked the threads in a not definite way with blurs and smudges in every particular; it is not a print because the image is perfectly visible before and behind: the Veil is very ancient and in times past the utilized technique was not so sophisticated.*

So, as there is no dye between threads (except a few touch ups), an alleged artist/forgery had to put a pigment manually on each thread (the average diameter of Manoppello threads is 0.12 mm), leaving no traces between. And he was able not only to copy Shroud face, but also obtain such image sharpness:



Has anyone such a tiny brush?

For now I leave aside further discussion about Manoppello, it's possible authenticity, and relation to the Shroud and Veil of Veronica. The final conclusion is:

This little cloth cannot be further ignored in Shroud research!