

IPACO expert report

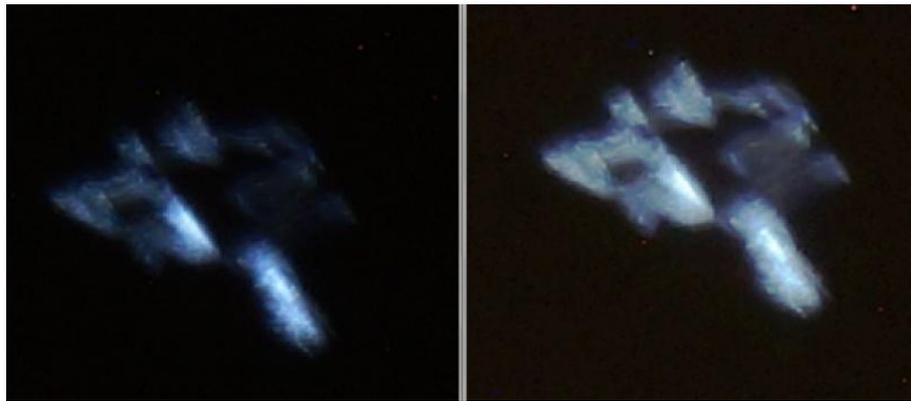
<i>Expert name</i> Antoine COUSYN	<i>Report date</i> June 21, 2012	<i>Last update</i> February 08, 2015	
<i>Type</i> IFO	<i>Class</i> B	<i>Explanation</i> <i>Star</i>	<i>Complement</i> <i>Blur effect or camera optical defect</i>
<i>Document</i> Photo	<i>Imaging location</i> Port-Saint-Louis-du-Rhône, France	<i>Imaging date</i> March 31, 2012, 01h14'51'' local time	



1- Copy of the original photo (noted as « photo 1 »)



2- Close-up of the original photo



3- Second close-up and enhancement of the original photo



4- Photo of the same area of the sky, taken 5-6 seconds later (noted as "photo 2")

I. Imaging circumstances

The photographs were taken by the witness from his porch during an astronomical observation.

The testimony states: *"In the screen of the reflex I saw a bright object, so I took the photo thinking it was a star, but as I was watching, this object does not really look like a star"*

The witness did not wish to communicate its original photo for analysis, but provides the following:

- EXIF data extracted with Exif Viewer; here are some of these:
 - ISO 80
 - Exposure time: 5 seconds
 - Resolution of 6000 x 3376
 - Flash Off
- Two close-ups extracted from the original photo (see above in 2 and 3)
- Another original photograph taken in the same area of the sky 5 or 6 seconds later (see above in 4).

II. Camera settings

The camera model that was used is a reflex Sony Alpha 77 (technical specifications [here](#)) mounted with a t2 adapter in a Bresser telescope N 203/1000 Messier LXD75 GoTo (technical specifications [here](#)) and an engine to compensate the terrestrial rotation.

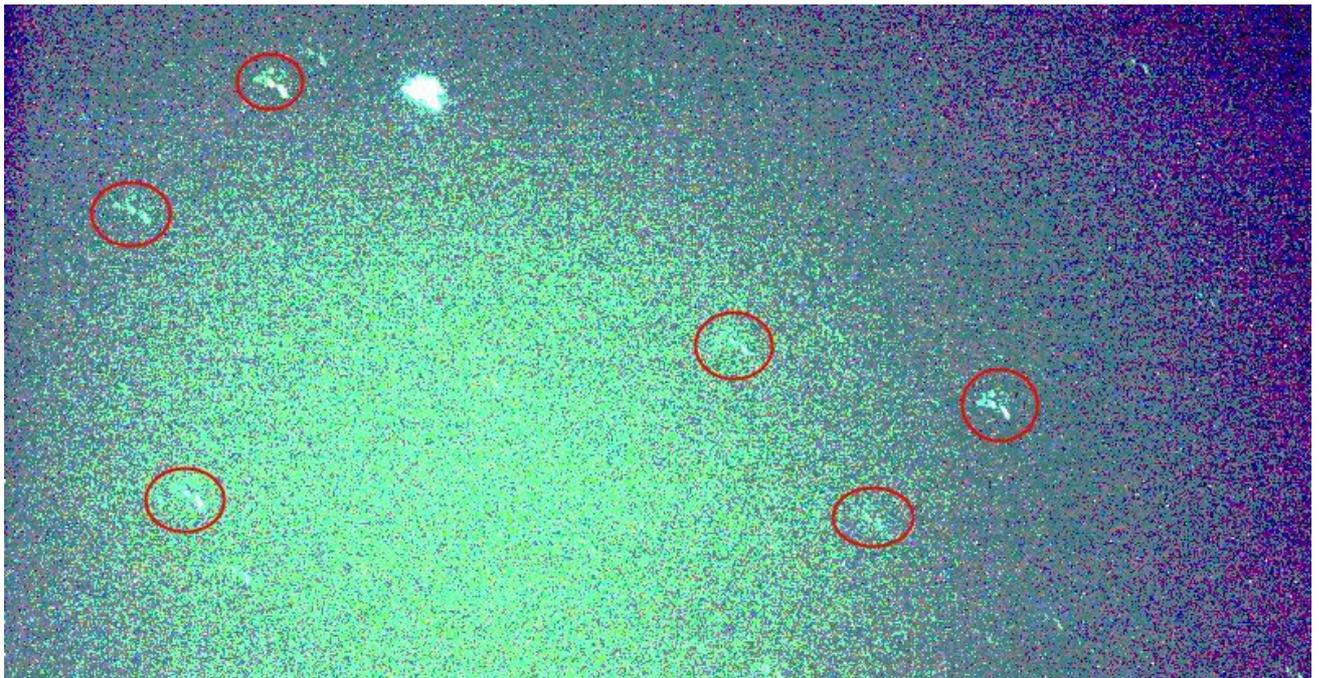




III. Data examination

Careful examination of the picture 1, object of study, and the following as well, taken from the same place of the sky a few seconds later, shows that the object appears to be at the same place as the star (affected by a "spun" effect), which is the brightest of the picture 2.

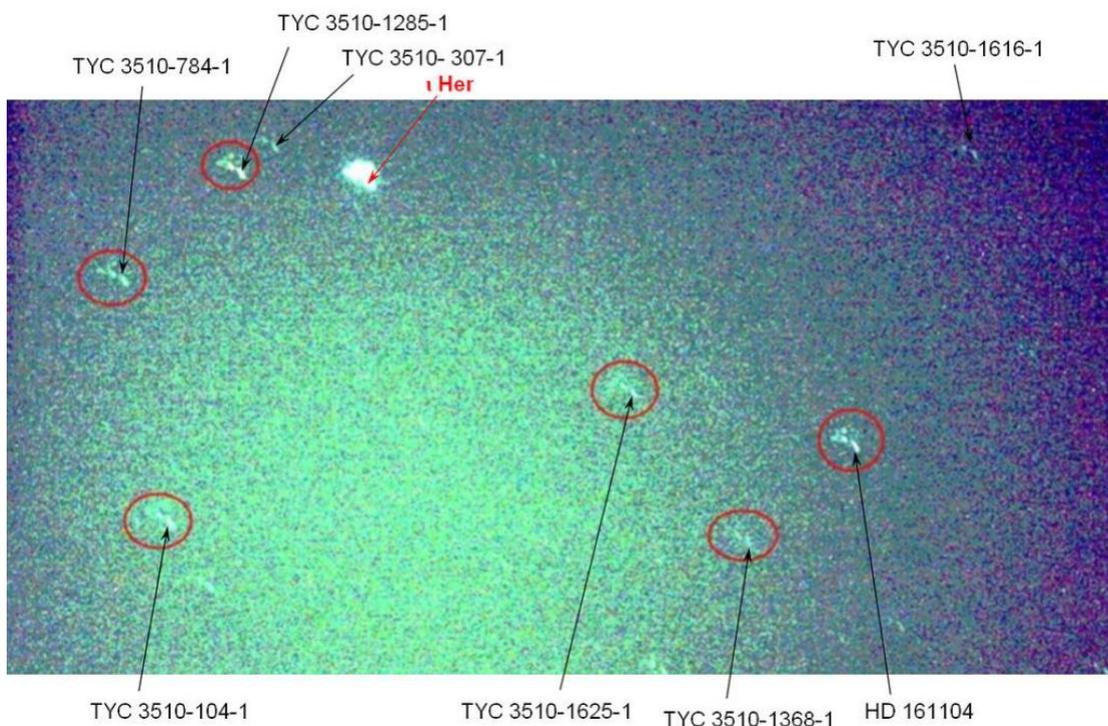
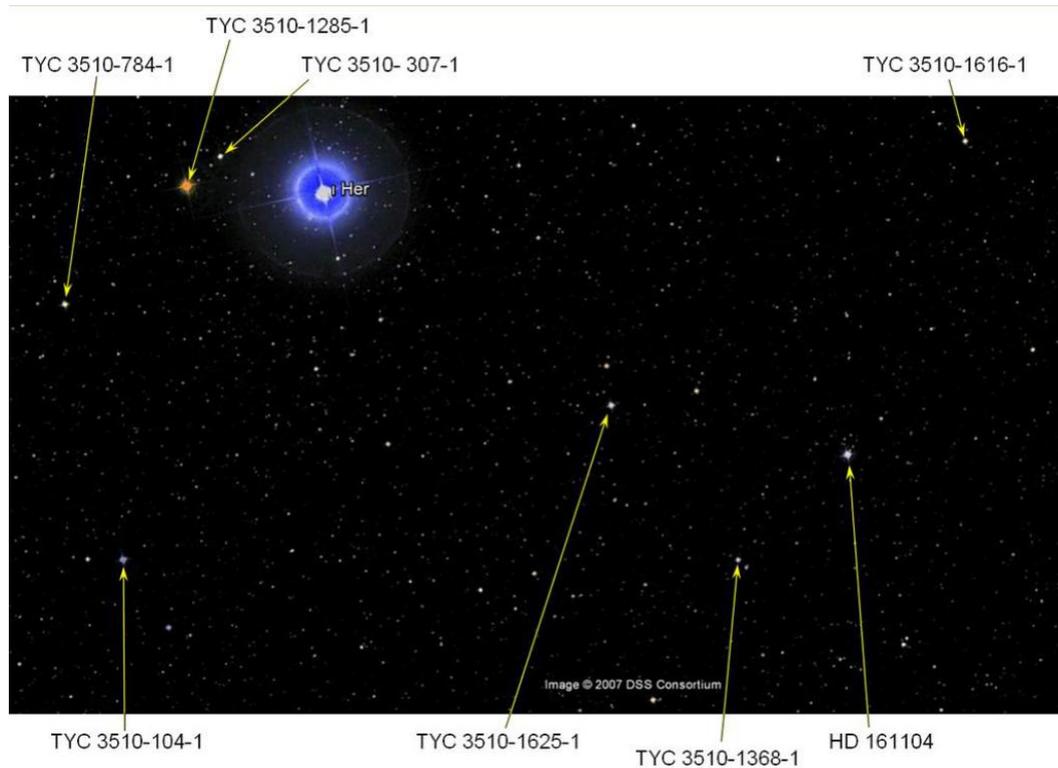
Thus, an overall enhancement of both contrast / brightness of the picture shows the presence of other "objects" having exactly the same shape:



A superposition of the two photographs 1 and 2, in a second time, exhibits a perfect alignment of both the "objects" of the photo 1 and of the stars in photo 2.

The GIF animation can be downloaded [here](#).

In a third step, using the nova.astrometry.net site, that allows from any sky photo (even of poor quality) to find the exact place of the photographed sky, showed that all visible objects of both the improved picture 1 and picture 2 coincide with 100% accuracy with one specific area of the sky in the Hercules constellation:



The animated GIF showing the superimposition of photo 2 and the concerned sky area is downloadable [here](#).

IV. Conclusion

The photographed object is simply the star *Rijl al Jathiyah* from the Hercules constellation, also noted ι Her (= iota Herculis) or HIP 86414.

Doubt remains, however, about the nature of the artifact that could produce this curious geometrical effect on the star.

This may be an effect of camera shake, or a temporary artifact in the optical light path between the entrance of the telescope and the camera sensor, or a combination of both at varying degrees.

V. Sources – Photo credits

All the photographic documents and discuss comes from the French subject here: « [2012: le 31/03 à 1h14 un ovni pas commun donner moi votre avis](#) », taken from the forum « [Ovni et Vie extraterrestre les mystères des ovnis](#) ».