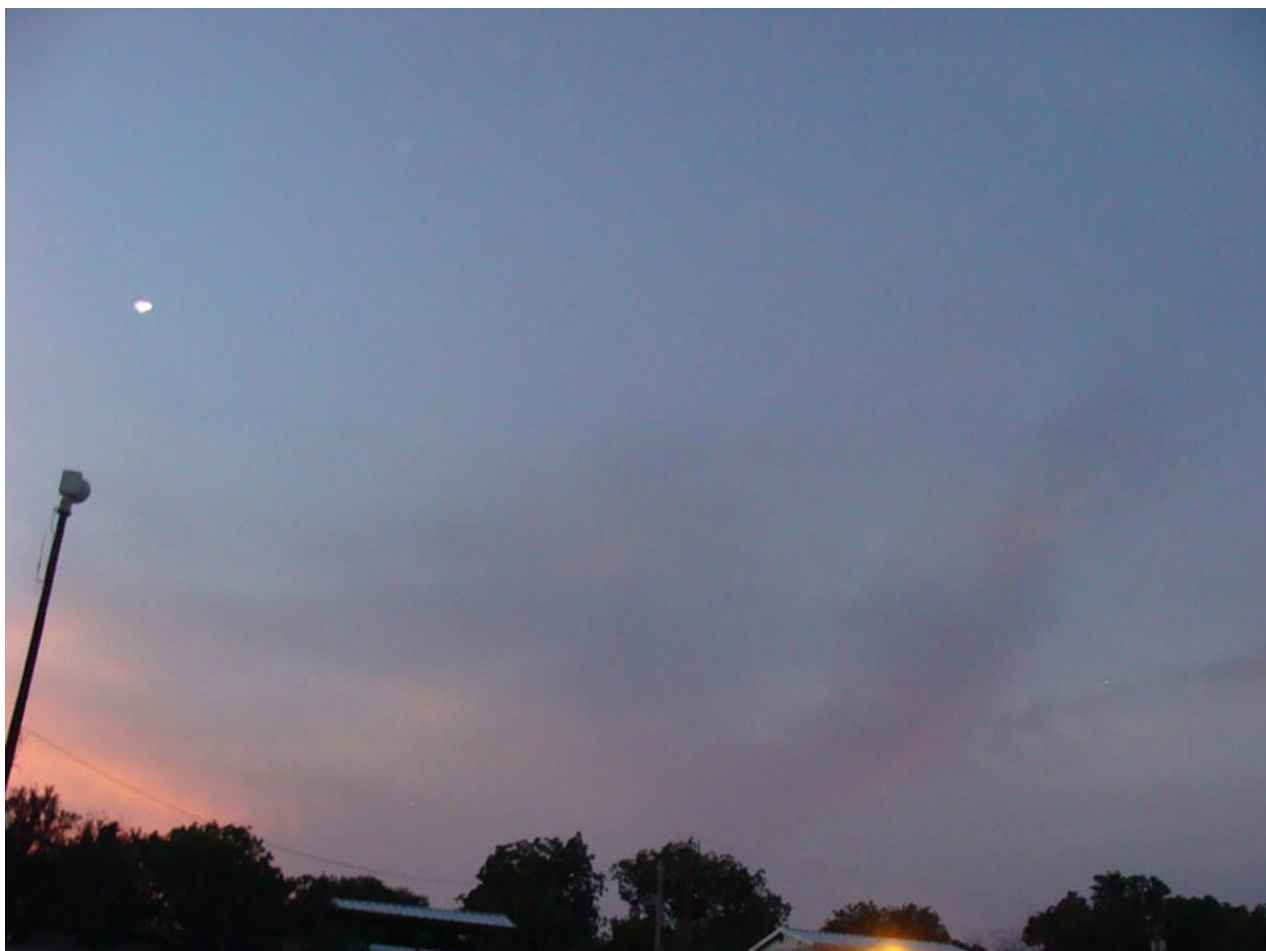


# IPACO expert report

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<i>Type</i> <b>IFO</b>	<i>Class</i> <b>A</b>	<i>Explanation</i> Insect	<i>Complement</i> Flash fired
<i>Document</i> Photo	<i>Imaging location</i> Big Rock Park, Glen Rose, Texas USA	<i>Imaging date</i> May 20, 2012, 20:20'15" Local time	



## I. Imaging circumstances

The witness made a few photographs in "tourist" in the area around Big Rock and do not see anything at the time of the shoot.

It was only after getting home and having emptied the card of his camera on his computer that the witness noticed the presence of this bright object on one of his photographs.

## II. Camera settings

The camera model that was used is a Sony DSC-H3 whose settings can be seen in details [here](#).



## III. Data examination and analysis

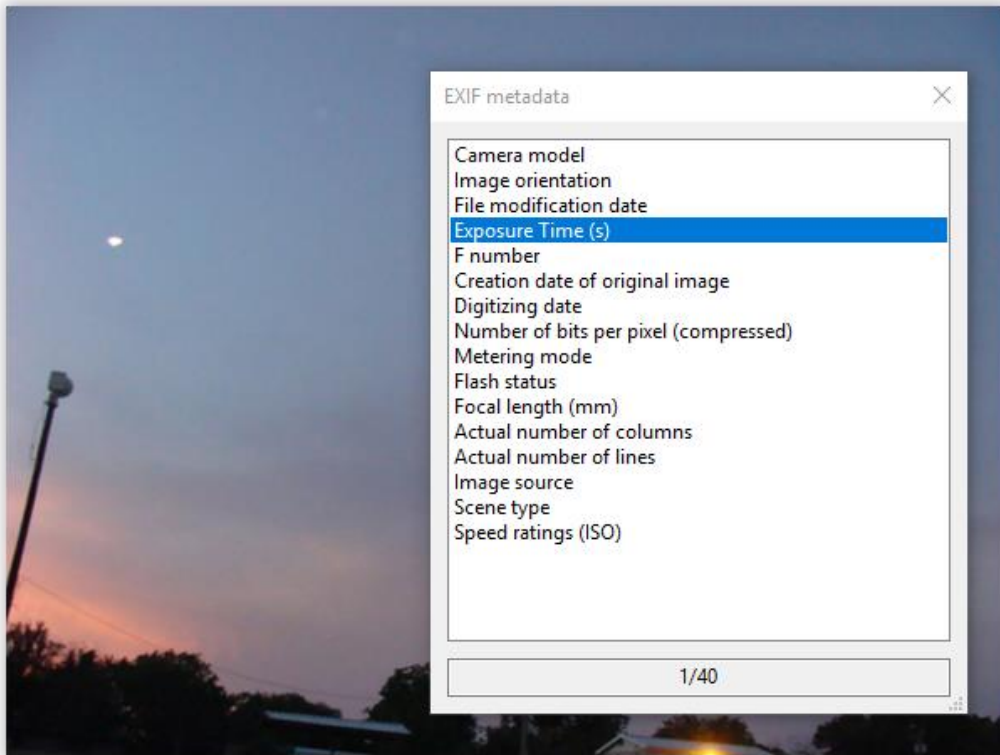
The examination of the photograph shows a luminous spot in the upper left quadrant, of uniform white and showing no blur, kinetics or focus.

Moreover, the rest of the photograph shows no motion blur.

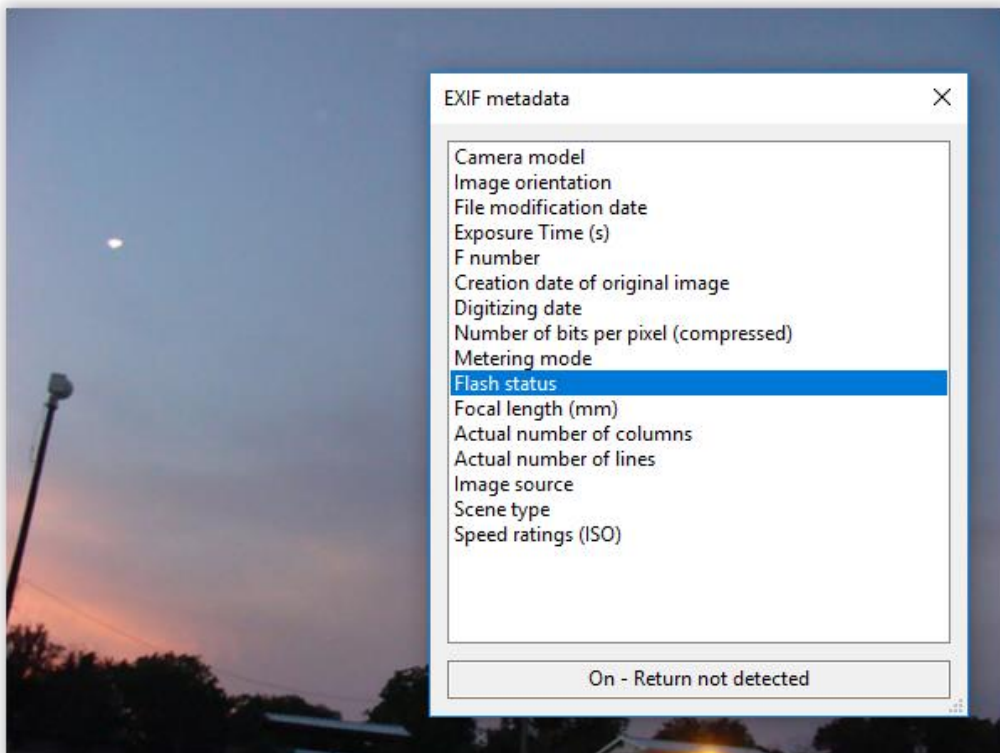
The hypothesis considered is that of an insect lit by the flash.

Upon inspection with IPACO, under the menu "Camera – EXIF metadata", we notice that:

- Exposure time was of 1/40s:



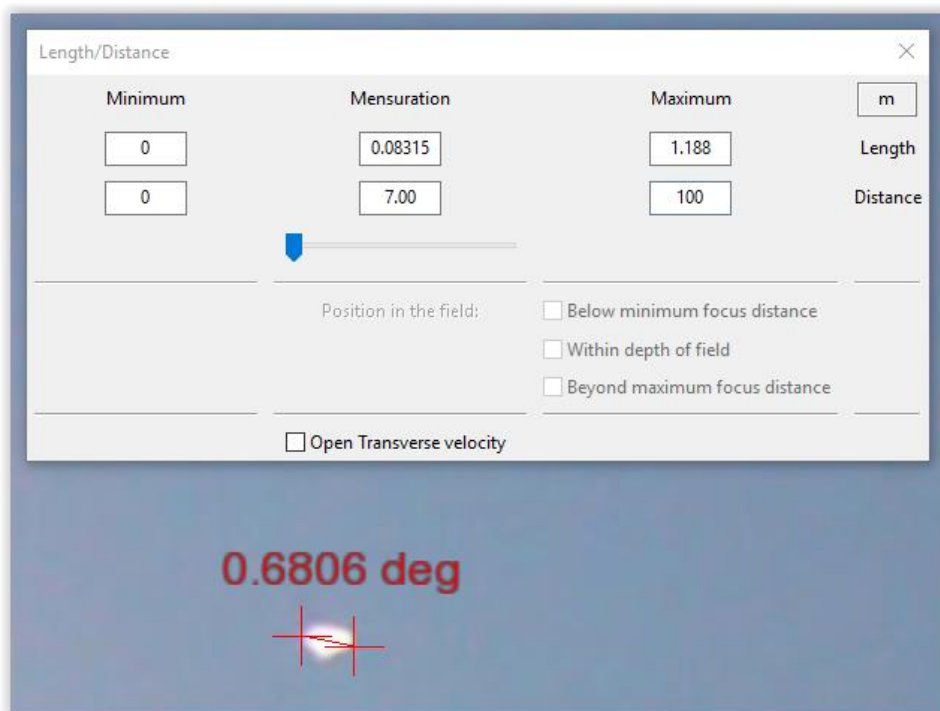
- The flash was fired and the return wasn't detected:



This flash, in Auto-ISO mode, has a [range](#) comprised between 0.2 m and 7 m.

The 35 mm equivalent focal length being known in the photograph, IPACO can measure, at first, the angular size of the object, which is about 0.67°.

Then, with the tool "Length/Distance", we can give size estimates of this object according to its distance from the camera:



We can see that, at the maximum range of the flash, the object measures about 8 cm long.

This maximum size possible corresponds to that of a moth, for example.

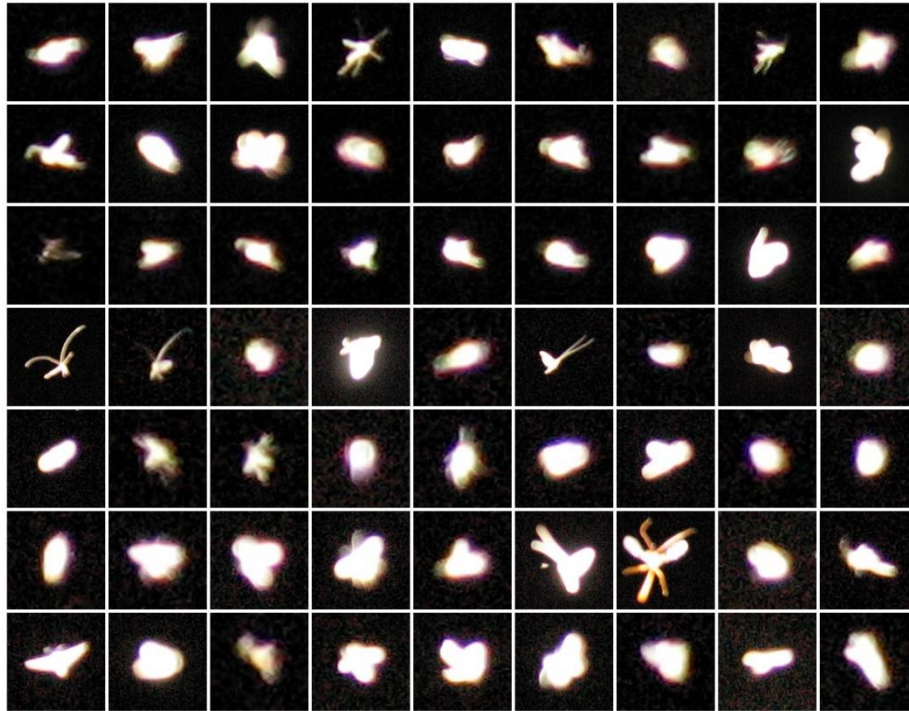
The use of the flash sometimes produces undesirable effects in photography, particularly when objects are relatively close to the camera, and at least within the range of the flash, thus returning their light to the lens. This light was not detected by the camera, probably because of the lit surface being too small.

The flash used here is a "long range" model with a maximum effective range of 7 m, thus illuminating a small object at a distance less than or equal to this range.

The photographer's testimony and the shooting conditions corroborate the hypothesis of a small moving object that was close to the camera; most likely an insect.

Indeed, busy while taking his photographs, the witness could not observe the very short moment during which the small moving insect was illuminated by the flash.

There are many examples of such insects captured by the flash of a camera:



#### IV. Conclusion

Taking into account both the objective data provided by the examination of the photographic document and the observer's testimony, we can conclude that the object in this document is an insect, probably a moth, of a size less than or equal to 8 cm, passing in front of the lens at the time of the shooting, illuminated by the flash at a distance less than 7 m away from the witness.

#### V. Sources – Photo credits

Original document provided directly to the expert by the witness.