Module 2.6

Metadata explained & why you can't always trust location metadata

Me.ta.da.ta [noun]
Information that describes other information

Metadata is information about an image or video that is attached to the media.

This can include:
- GPS location
- Date and time of capture
- Camera model
- Settings like ISO, shutter speed

There are several types of metadata. For images, the most useful is EXIF data.

There are a number of different free EXIF viewers.

EXIF data can show you when the content was captured or when it was uploaded.

EXIF data can tell you where the content was captured (if 'locator' was turned on!)

...what device was used to capture the content…

But there are a few problems:

1. There is no EXIF data for video.
2. Social networks rip out metadata, so you need to try to get access to the original imagery.

When you run this Instagram image through an EXIF data viewer, you get no results

When you run the original image through the same EXIF data viewer, you get these results

3. Metadata is easily changed. You can even edit a photo's EXIF data on your phone.

Bottom line: Always try to get the original image or video directly from the device it was captured on.

Remember, metadata can provide additional support to your investigation but can never be 100% trusted.

Why you can't always trust location metadata

Even if a post is correctly geo-located, it doesn't necessarily mean that the image or video is from there.

This tweet was sent from Yemen, but the photo is from the 'Highway of Death', the name given to the road to Basra during the first Iraq war.

You can easily change EXIF data on an Android phone.

You can't edit EXIF data directly on an iPhone.

However, a free iOS app called Photo Investigator allows you to.

Bottom line: Location information in photos or on social media networks is often trustworthy. But you can never be 100% certain.