



WUSAT-3 – A VLEO Proof-of-Concept Wildlife-Tracking Technology Mission



WUSAT-3

Satellite Wildlife Monitoring Technology
VLEO via ESA FYS Nanoracks/ISS

William Crofts
Julia Hunter-Anderson

The WUSAT-3 Mission

Current Issues with tracking wildlife from Space:-

There are many species – particularly small birds – that researchers/conservationists would like to track, but they cannot carry the large/heavy GPS tags. Developing small, light tags, would be a major boost to biodiversity research



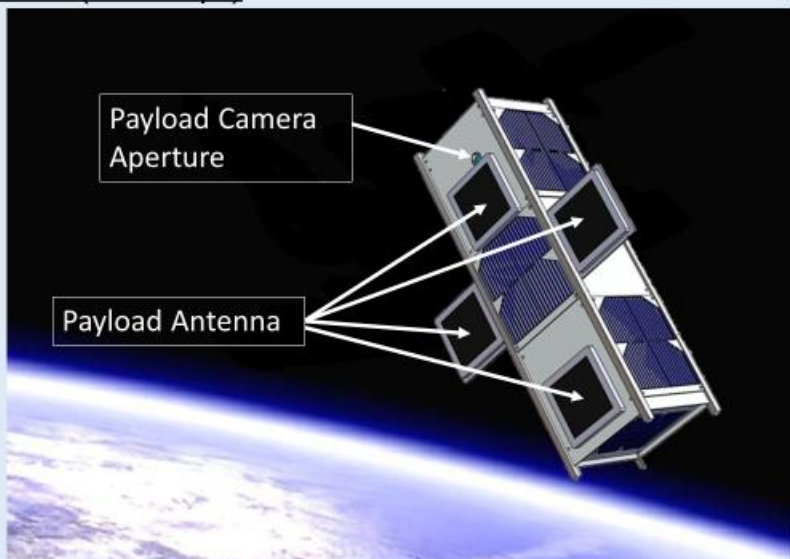
Endangered Barn Swallow © Stephan Trösch



The WUSAT-3 Payload

The Payload Instrument (Concept)

WUSAT-3's external payload components are on the **nadir** facing side of the satellite.



Payload concept: The Payload Antenna identifies a tag signal on the Earth's surface, this triggers the camera to take an image. An offset of the tag signal, calculated for each antenna, provides coordinates for the location of the signal source within the image.

