



DRONES



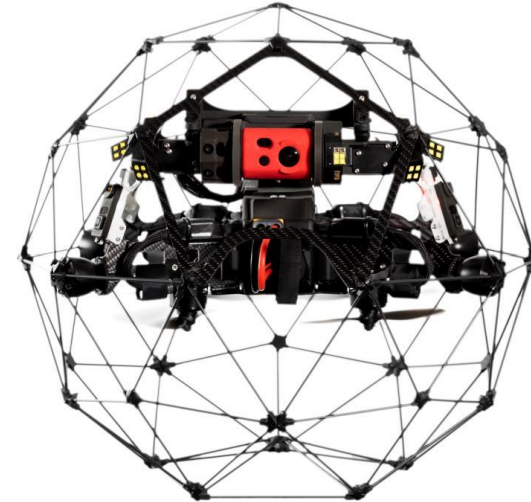
Meet the Western Fleet



DJI Matrice M300 RTK



DJI Mini 2 (under 250g)



Flyability Elios2



Parrot Anafi USA (Military Spec)



Swell Pro3 – All Weather training drone



DJI Matrice M210 V2



- **Safety** – Reducing the requirement for personnel to access track/lineside access
- 5 x Drone Pilots on Western Route (2 further in November)
- Over 300 Successful planned activities
- No impact on train running schedules.
- Can efficiently inspect large areas at a time
- Can easily inspect difficult to access locations and structures
- Flexible mission deployment - Right function deployed
- Visible Drone Footage live feed Terradec (November 2021)
- Personnel involved and attending incidents without the requirement to access the track – viewing platform
- **Projects** – Pre Site surveys, scheme layouts, access points and security surveillance.
- **BVI** – Supplementary Inspections
- **Overhead line equipment condition monitoring** - Supervisor Visual Inspection and Basic Visual Inspections inclusive of thermal inspections.
- **D&P Asset Inspection** - Overheating equipment locating and identification – Thermal inspections of electrical substation equipment
- **Earthworks & drainage** – Landslip monitoring & identification
- **Structure inspections / Level Crossing Inspections**
- **Fence line inspection** – Off Track
- **Survey Data** - Lidar capability / 3D Mapping/Modelling





Vegetation



Overhead line



BVI



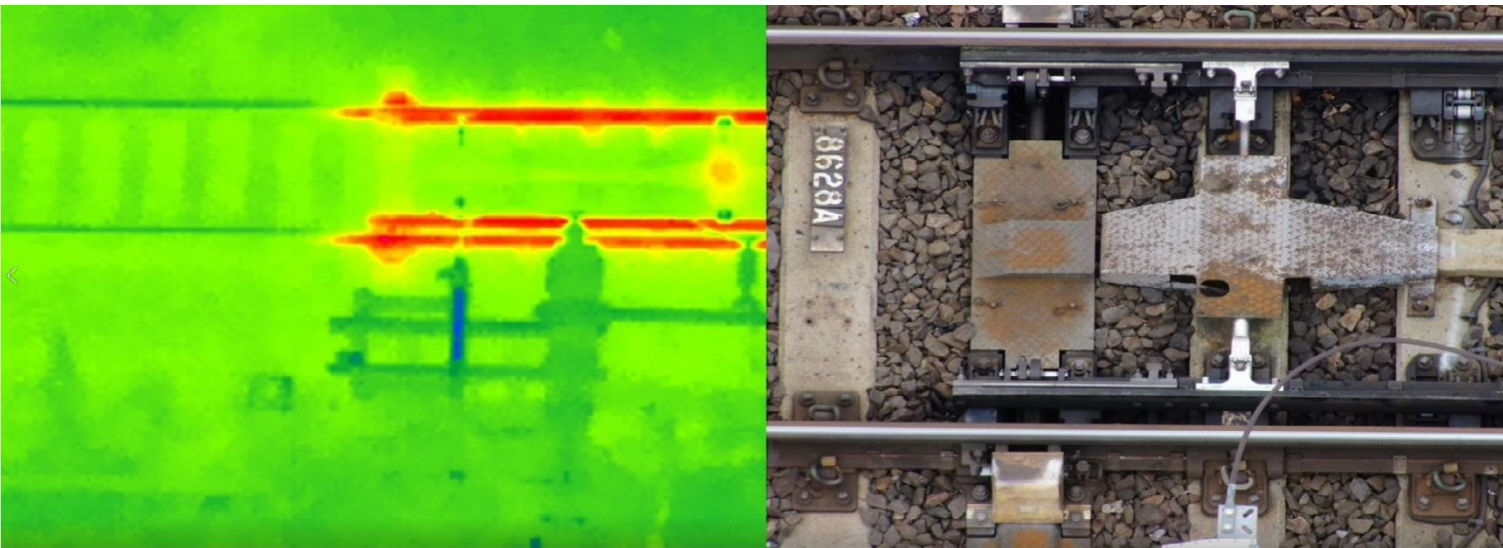
Significant Project Events – Comms



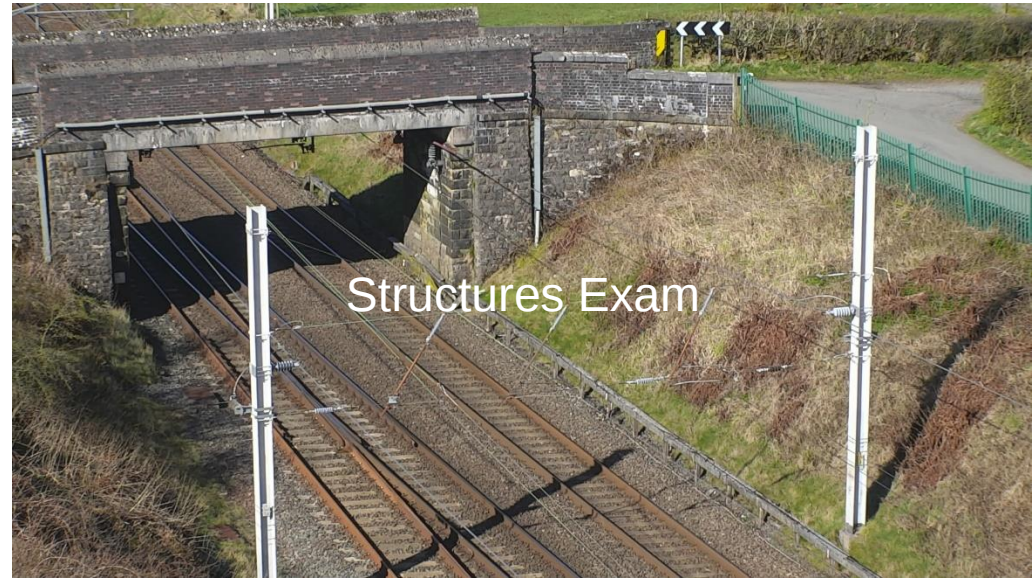
Overhead Line Inspection



Landslide

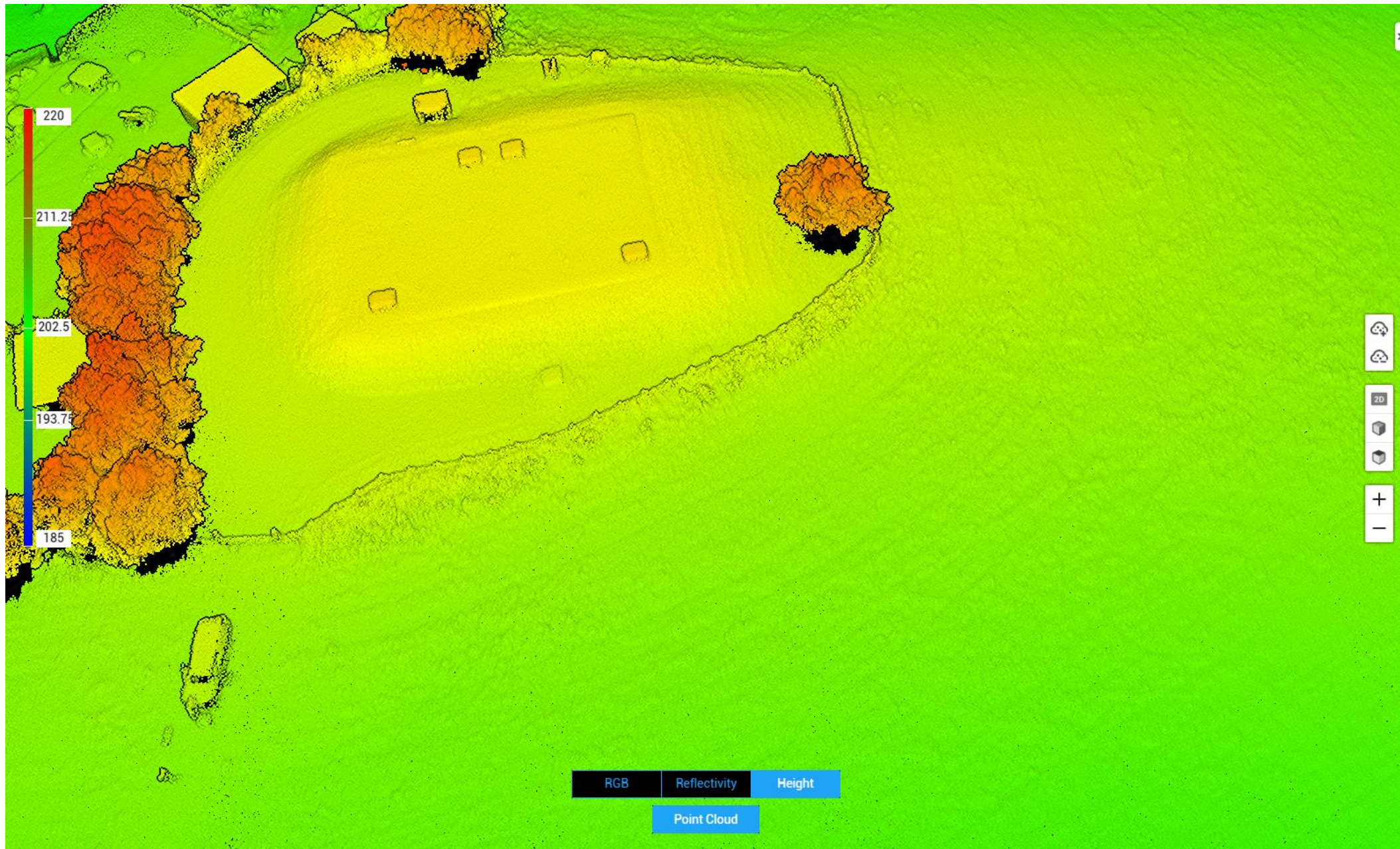


Points Heating C2 Inspection with a Thermal image Overlay



Structures Exam





Lidar Imagery with Height Perception Taken at a test site in Devon





Incident Response, The Damage to this New Hitachi Train was the Result of Colliding with 7 Cows on the Main Line at Wotton Bassett





Aerotriangulation Model



3D Image Created in North Wales During a Sea Wall Defence Inspection, (this image has over 200 pictures stitched together)



Level Crossing Signage and Vegetation Inspections





Video showing Western Power repairing a neutral section supplying a NR 25000v substations following a major storm

