**Key details for thermal imaging survey**

* **Camera**
  + Optris 450. Specs here: <https://www.optris.global/thermal-imager-optris-pi400-pi450>
  + Lens: 080 (80°)
  + Lens optics: 80° x 54° FOV / f = 5.7 mm
* **Flight**
  + Flight height: 1000 ft/304.8 m
  + Flight speed: ~80 knots
  + Flight time: 7:30-8:30 am
* **Images**
  + Array size: 382 (W) x 288 (H)
  + CSVs have header line with array size
  + Frame rate: 27 Hz
  + Full dataset subsampled to 3 images per second
  + Footprint size on ground: 490 m H x 320 m V
  + Individual pixel size (internal field of view): 0.92 m
* **Lens calibration**
  + Took 44 calibration images (should be more than we need for a good correction)
  + Array size: 382 (W) x 288 (H)
  + CSVs have no header line
  + Used a dot board, rather than a checkerboard.
  + Matte black dots on shiny silver background
  + Dot board dimensions: 7 x 7
* **Conditions during flight**
  + Wind direction
    1. 4 am – 8:30 am: E/SE
    2. 8:30-9:00 am: N/NW
  + Wind speed
    1. 4-5 am: 34-39 kph
    2. 5-6 am: 38-41 kph
    3. 6-7 am: 28-38 kph
    4. 7 am: 28
    5. 7:15 am: 29
    6. 7:30: 25
    7. 7:45: 21
    8. 8:00: 15
    9. 8:30: 6
    10. 8:45: 11