

VideometerLab for potato strip analysis

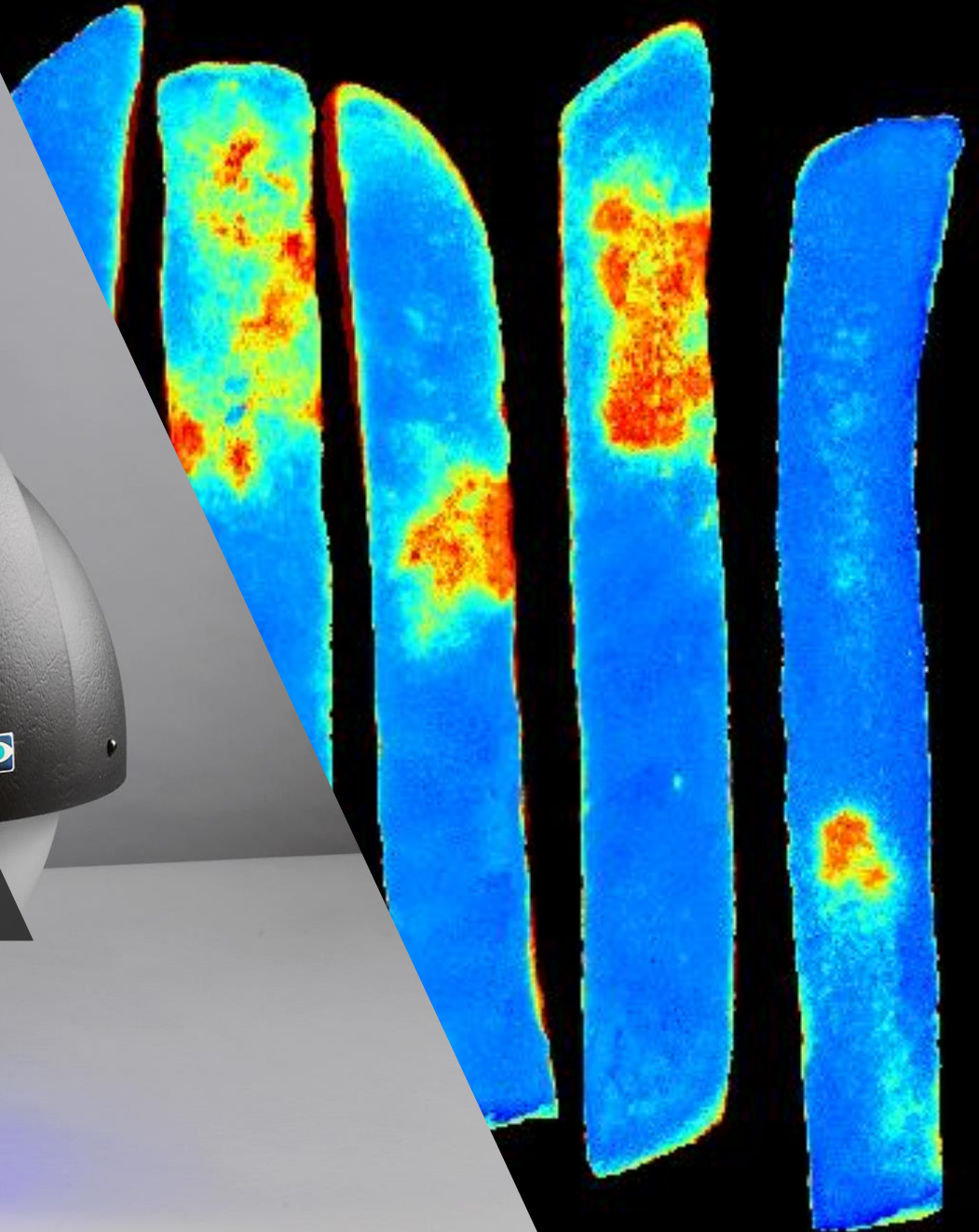
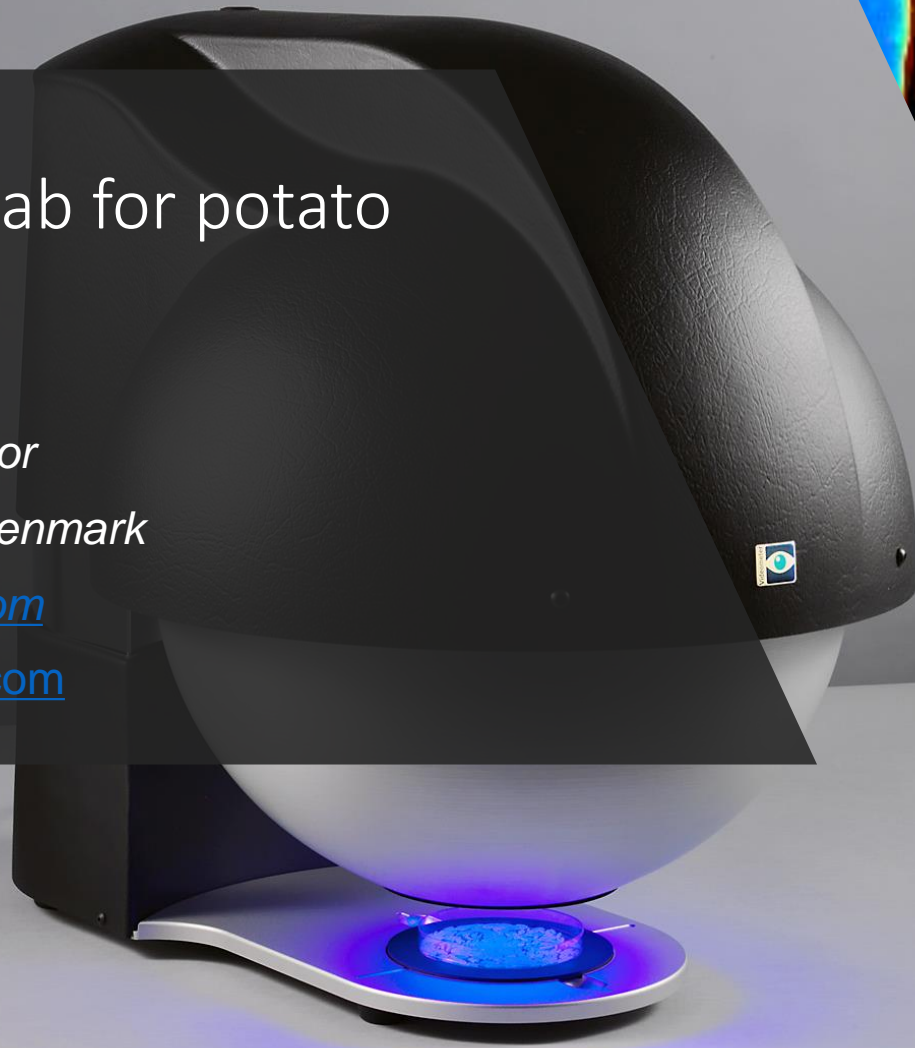
Videometer A/S

Horkaer 12B, 3. floor

DK-2730 Herlev, Denmark

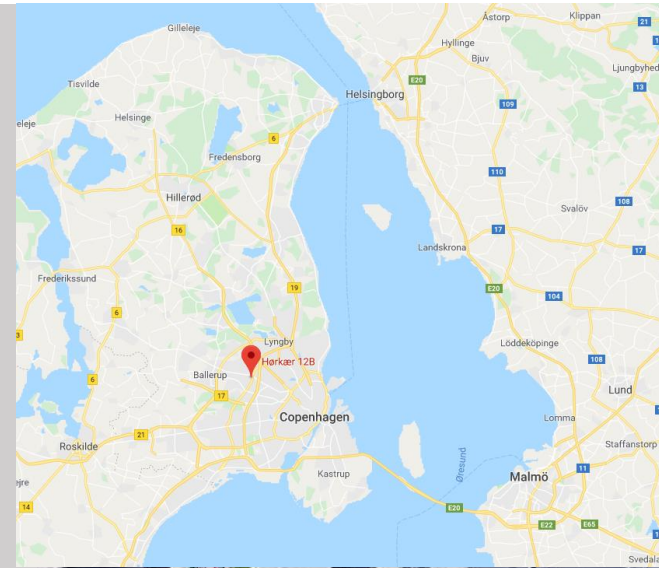
www.videometer.com

mail@videometer.com

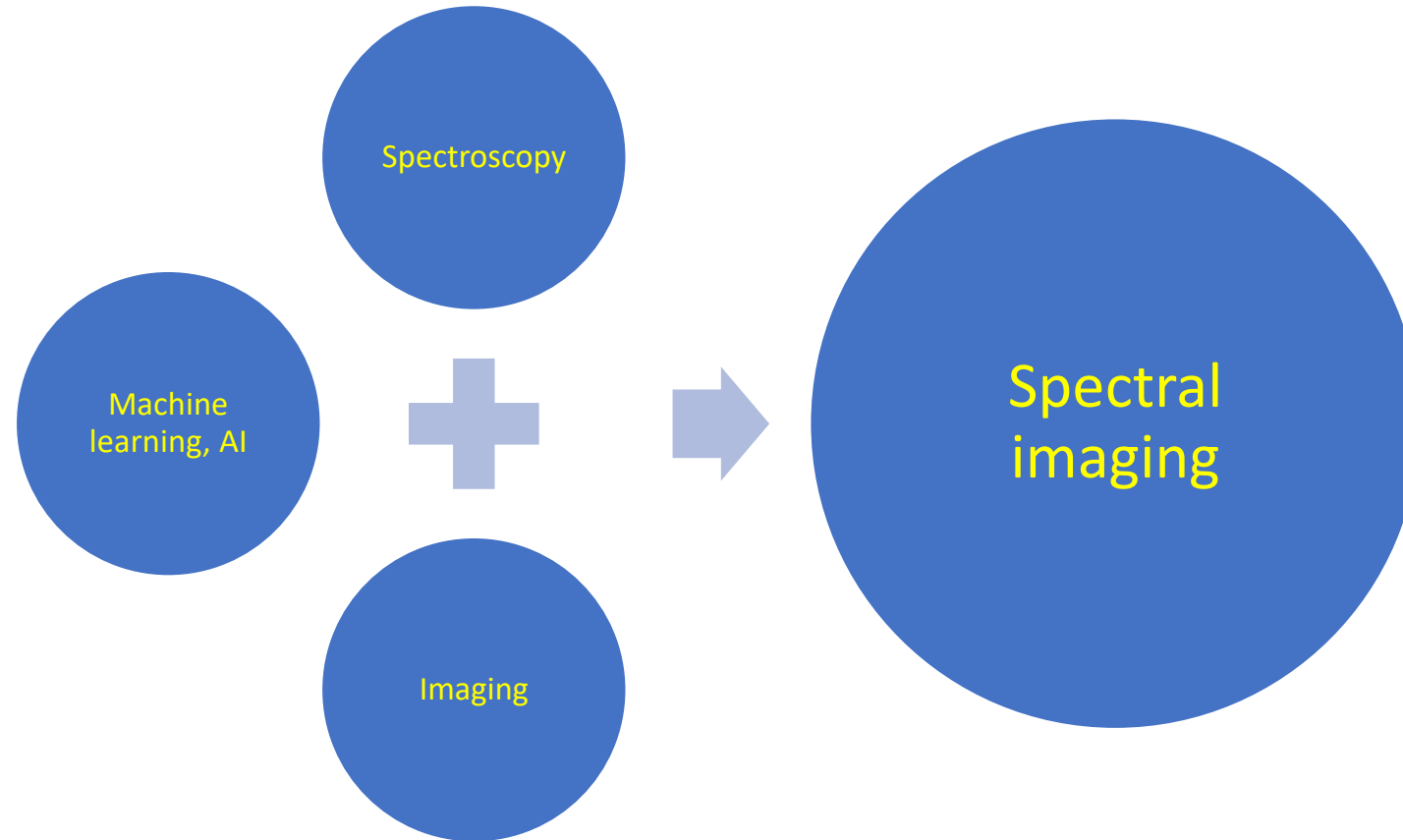


Videometer A/S

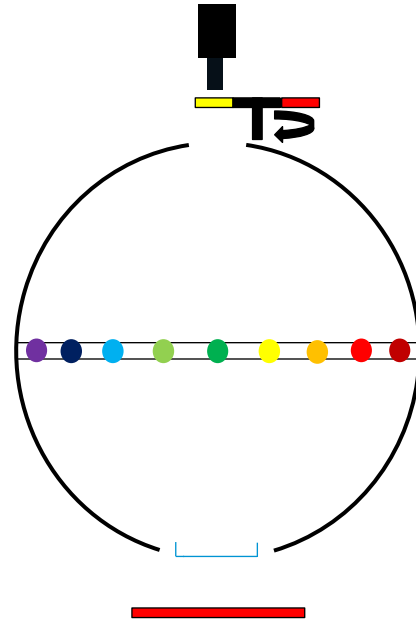
- Spectral imaging company
- Founded 1999
- Products
 - Lab instruments,
 - Turn-key in-line systems, and
 - R&D projects
- App. 700 imaging R&D projects since 2000
- In-line 24/7 spectral imaging since 2002
- Based in Copenhagen, Denmark
- Partnerships worldwide



Spectral imaging



LED band-sequential spectral imaging



Camera and lens

Emission filter changer

Integrating sphere

LEDs of multiple wavelengths

Sample is placed in target opening

Backlight or background



- LEDs: Stable, durable, large selection, rapidly developing technology
- Up to 20 different high-resolution bands acquired sequentially in 0.5-1.0 seconds
- May be combined with emission filters, backlight, and darkfield illuminant
- Combined **reflectance spectral imaging** and **fluorescence spectral imaging** possible!

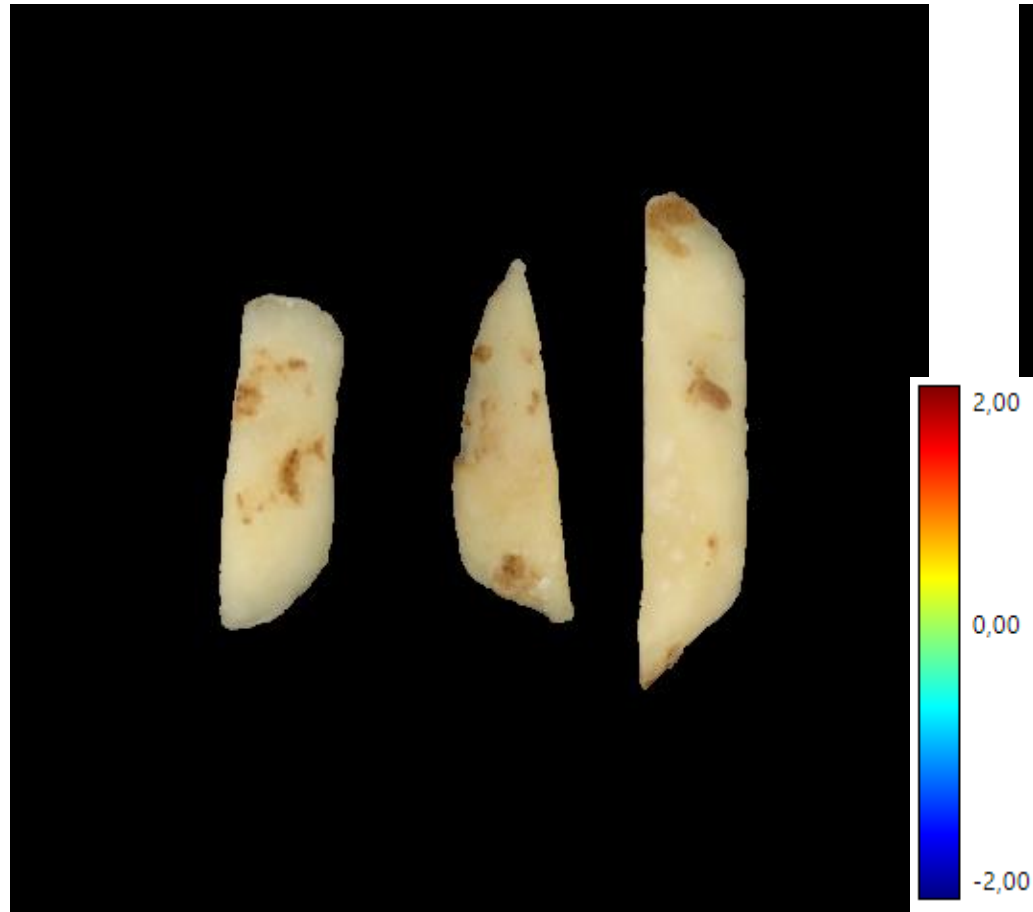
VideometerLab 4

Flexible lab and at-line instrument for spectral imaging

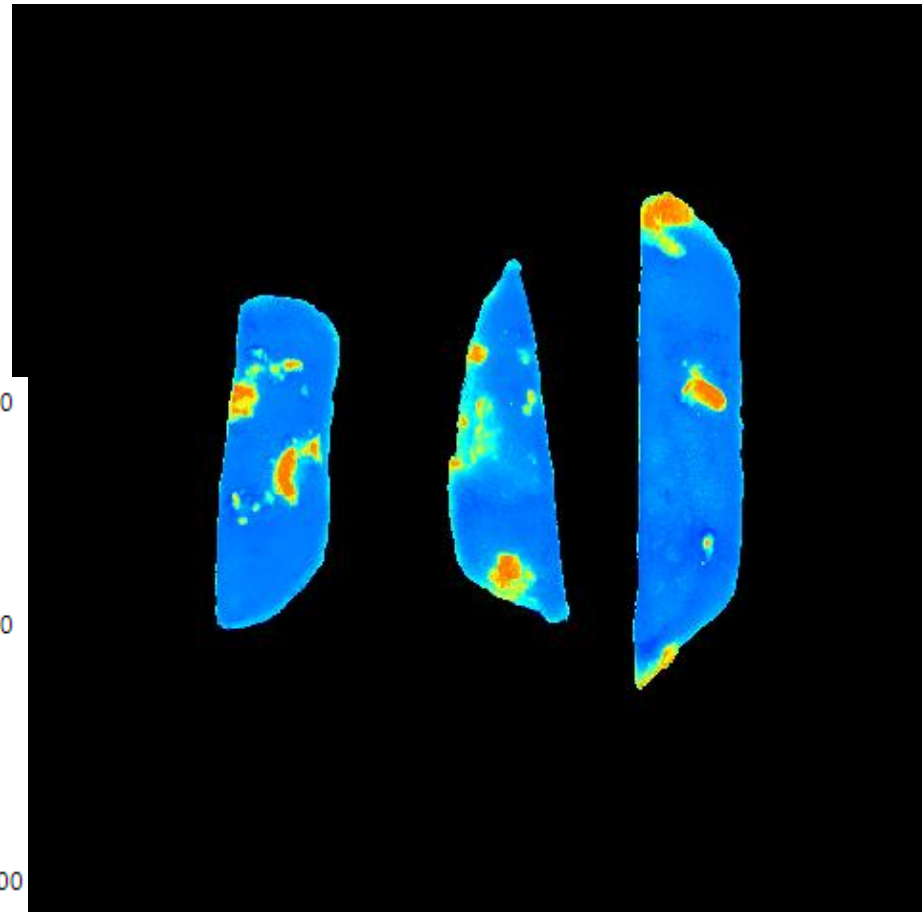


- 19-20 spectral bands in the range 365-970 nm
- 4096x3000 pixels, 30 μm pixelsize, FOV 123x90 mm
- Very homogeneous and diffuse illumination
- Strobed multi-LED light source
- 10 seconds per sample including handling
- Optional backlight strobe
- Optional fluorescence bands
- Software for calibration, acquisition, and analysis
- Patented technology

Peel residue detection

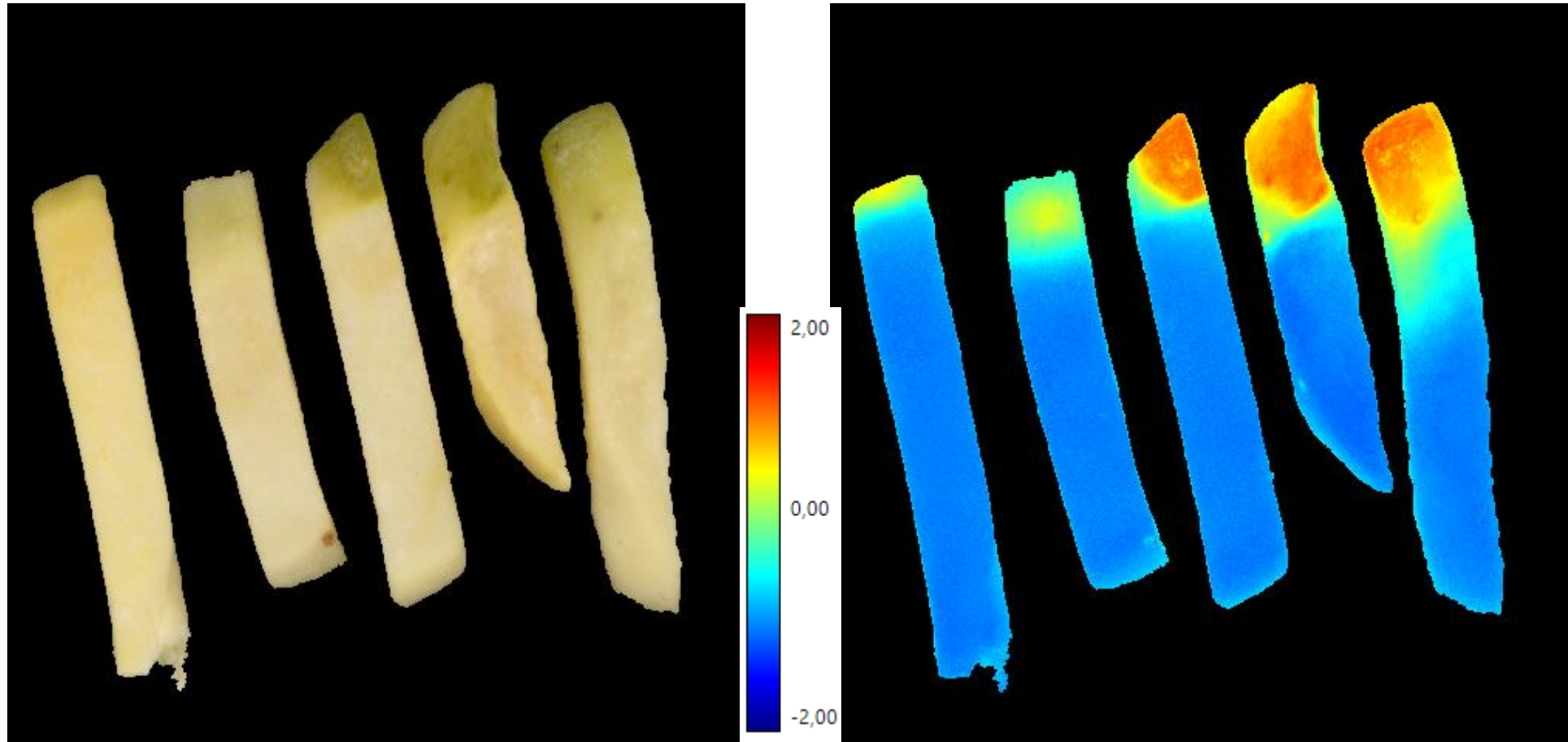


Three strips with peel residues



Peel residue heat map made by nCDA

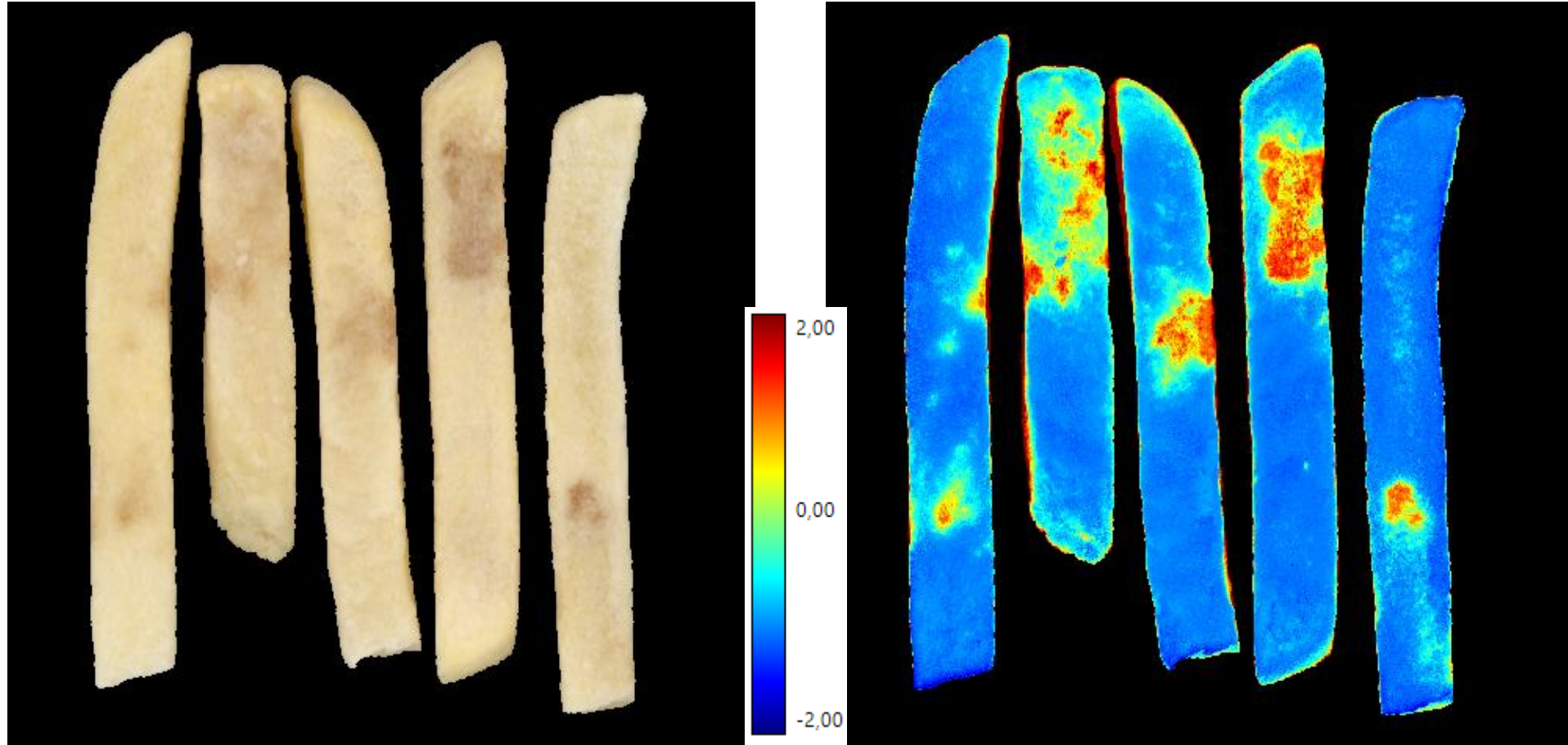
Greeniness detection



Two acceptable green left, and
three defect green right

Greeniness heat map made by
nCDA

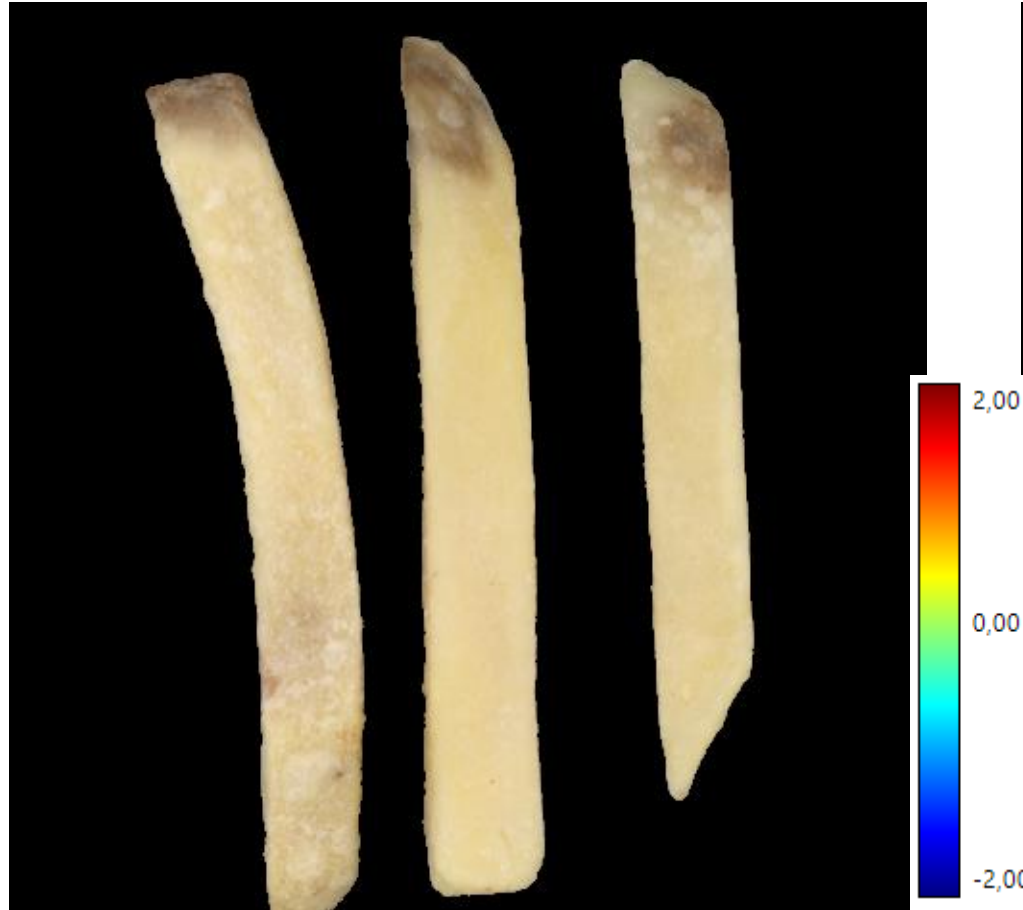
Rusty detection



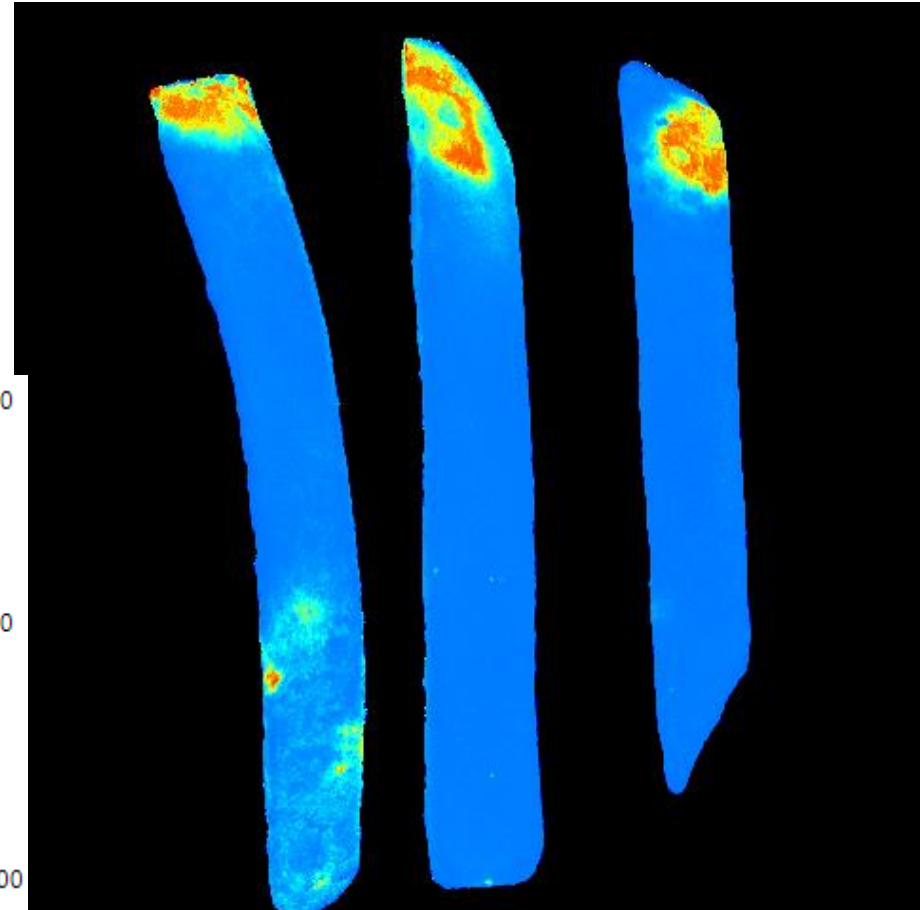
Five strips with rusty areas

Rusty heat map made by nCDA

Dark bruises



Three strips with dark bruises

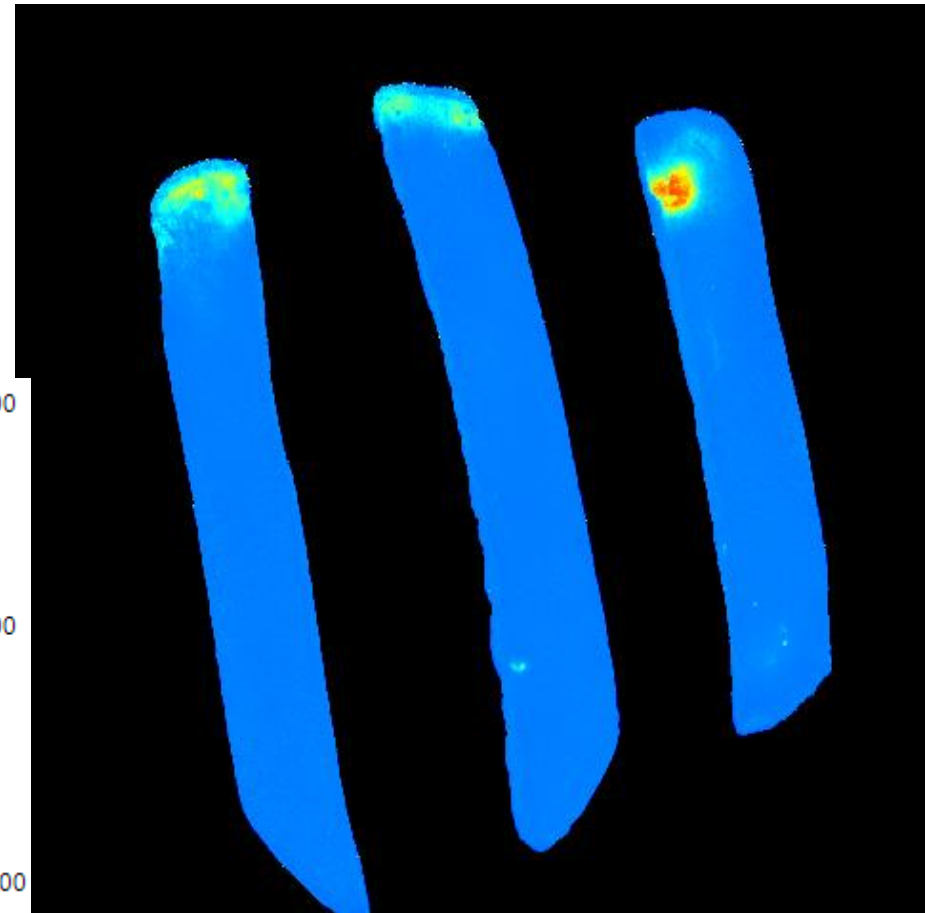


Bruise heat map made by nCDA

Light bruises

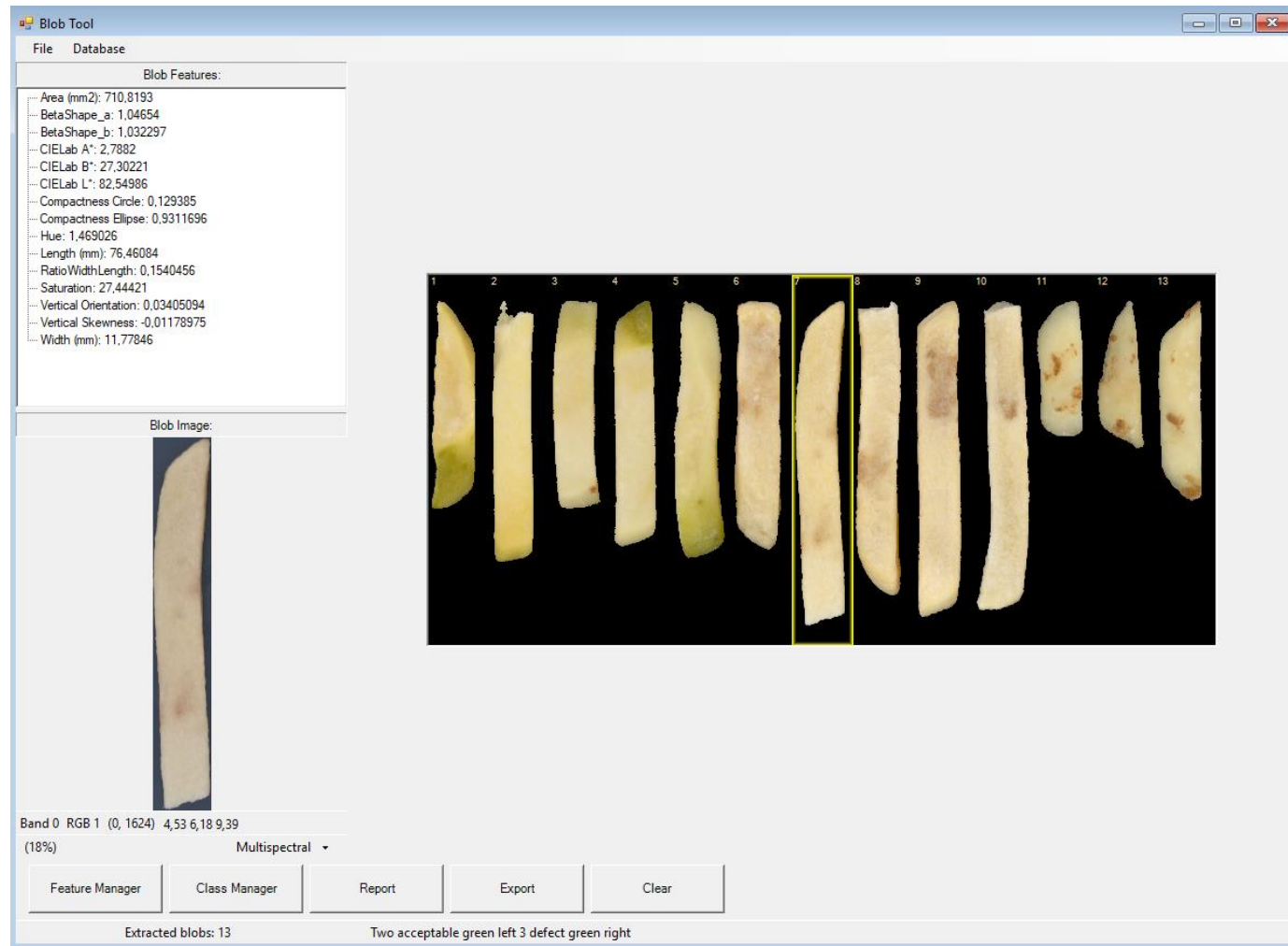


Three strips with light bruises



Bruise heat map made by nCDA

Building strip database



Strip size, shape, color, defects etc. may be calculated and compared for the entire population of strips.